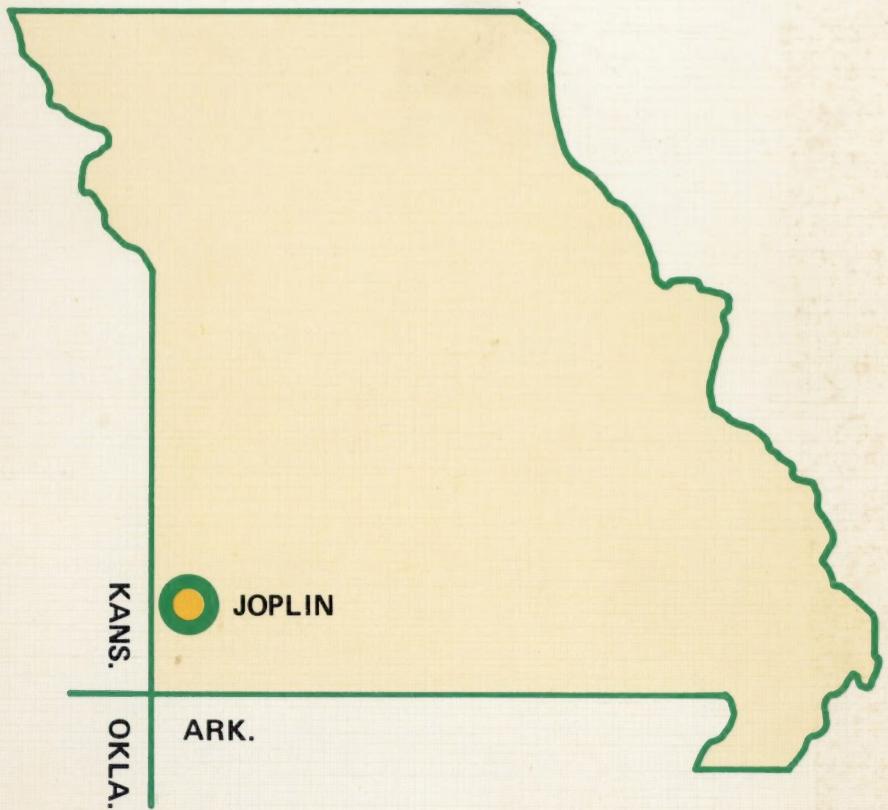


Cecilia Heakle

MISSOURI SOUTHERN STATE COLLEGE



CATALOG
1972-73

*** 1972 ***

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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16	17	18	19	20	21	22	20	21	22	23	24	25	26	19	20	21	22	23	24	25	16	17	18	19	20	21	22	
23 _o	24 _o	25	26	27	28	29	27	28	29					26	27	28	29	30	31		23 _o	24	25	26	27	28	29	
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14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	
28	29	30	31				25	26	27	28	29	30		23 _o	24 _o	25	26	27	28	29	27	28	29	30	31			
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
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10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30			25	26	27	28	29	30	31	

*** 1973 ***

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17	15	16	17	18	19	20	21	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24	22	23	24	25	26	27	28	
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MAY							JUNE							JULY							AUGUST							
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13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
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9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	
23 _o	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30		23 _o	24	25	26	27	28	29	

Missouri Southern State College

JOPLIN, MISSOURI



OFFERING BACCALAUREATE
AND ASSOCIATE DEGREES

CATALOG OF
General Information and
Announcement of Courses

1972-1973

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FOREWORD

This catalog presents general information, requirements for admission and graduation, and course offerings for the academic year 1972-73, beginning June 1, 1972. The register of administrative officers and instructors is for the 1971-72 year. The College reserves the right to amend regulations and change fees when necessary.

The college is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color, or national origin.

**CORRESPONDENCE DIRECTORY
MISSOURI SOUTHERN STATE COLLEGE**
Joplin, Missouri 64801
Tel. Area 417 624-8100

Admission of students	Director of Admissions
Alumni affairs	Director of Alumni Affairs
Athletic activities	Director of Athletics
Business affairs and purchases	Director of Financial Affairs
Catalog and bulletins	Director of Admissions
Credit evaluation and transcripts	Registrar
Employment, On Campus (student part-time)	Office of Financial Aids
Evening Session	Coordinator of Evening Session
Faculty appointments	Dean of the College
Financial Aids	Office of Financial Aids
Gifts and annuities	President
Housing	Director of Housing
Loans	Office of Financial Aids
Orientation	Dean of Men, Dean of Women
Public Information	Director of Public Information
Student Organizations	Dean of Men, Dean of Women
Summer Session	Dean of the College
Testing and Counseling	Director of Guidance and Counseling
Veterans affairs	Office of Financial Aids

COLLEGE CALENDAR 1972-1973

SUMMER SESSION—1972

June 1 (6:30 p.m.-8:00 p.m.)	Registration
June 2 (8:30 a.m.-4:00 p.m.)	Registration
June 5	Classes Begin
June 9	Last Day for Class Changes and Late Registration
June 23	Withdrawal After This Date No Refund of Fees
July 4	4th of July Holiday
July 12	Last Day to Drop Courses with "W"
July 28	Summer Session Ends
July 29 (3:00 p.m.)	Commencement

FIRST SEMESTER—1972-1973

August 21-22	Faculty Study Conference
August 23-24-25	Registration for Day Session
August 24	Registration for Evening Session
August 28	Classes Begin
September 1	Last Day for Class Changes
September 4	Labor Day Holiday
September 22	Withdrawal After This Date No Refund of Fees
October 20	Midsemester (D&F Grades are Due, Friday, October 20 by 5:00 p.m.)
November 16	Last Day to Drop Courses with "W"
November 17	Forensic Tournament—No Classes
November 22 (after last class, day and evening)	Dismissal for Thanksgiving
November 27	Classes Resume
December 22	End of First Semester

SECOND SEMESTER—1972-1973

January 8-9	Faculty Conference
January 10-11-12	Registration for Day Session
January 11 (6:30 p.m.-8:00 p.m.)	Registration for Evening Session
January 15	Classes Begin
January 19	Last Day for Class Changes
February 9	Withdrawal After This Date No Refund of Fees
February 19	Washington's Birthday Holiday
March 9	Midsemester (D&F Grades Due by 5:00 p.m. Friday, March 9)
March 12-16	Spring Vacation
March 19	Classes Resume
April 6	Last Day to Drop Courses with "W"
April 20	Good Friday Holiday
May 17	Classes End
May 22	Commencement (7:00 p.m.); End of Semester

SUMMER SESSION—1973

May 31 (6:30 p.m.-8:00 p.m.)	Registration
June 1 (8:30 a.m.-4:00 p.m.)	Registration
June 4	Classes Begin
June 8	Last Day for Class Changes and Late Registration
June 22	Withdrawal After This Date No Refund of Fees
July 4	4th of July Holiday
July 11	Last Day to Drop Courses with "W"
July 27	Summer Session Ends
July 28 (3:00 p.m.)	Commencement

MISSOURI SOUTHERN STATE COLLEGE

1972-1973

BOARD OF REGENTS

Fred Hughes, President 1975
Thomas E. Taylor, Vice-President 1974
*Elvin Ummel, Secretary
*Gene Taylor, Treasurer
Mills H. Anderson 1976
Norval M. Matthews 1972
Jerry E. Wells 1973

BOARD OF TRUSTEES

Fred Hughes, President 1976
Gene Taylor, Vice-President 1972
Norval M. Matthews, Secretary 1974
*Mills H. Anderson, Treasurer
Jerry E. Weils 1974
Thomas E. Taylor 1976
Elvin Hummel 1972

*Appointed by respective boards

ADMINISTRATIVE STAFF

Leon C. Billingsly	President
Edward S. Phinney	Dean of the College
Fred Cinotto	Administrative Assistant
Paul R. Shipman	Administrative Assistant and Director of Financial Affairs
James K. Maupin	Associate Dean for Technology
Harold Cooper	Chairman, Division of Arts and Sciences
*L. Keith Larimore	Chairman, Division of Business Administration
Robert J. Miller	Acting Chairman, Division of Business Administration
Charles F. Niess	Chairman, Division of Education and Psychology Director of Teacher Education
George H. Volmert	Registrar
W. Ralph Winton	Director of Admissions
Floyd E. Belk	Dean of Student Personnel Services
Glen D. Dolence	Dean of Men
Linda C. Hill	Dean of Women
Eugene C. Mouser ..	Acting Director of Guidance and Counseling
Larry K. Karst	Counselor
James E. Russell	Veterans Counselor
Lloyd L. Dryer	College Psychologist
Richard D. Humphrey	Director of Aids and Awards
Irma J. Hartley	College Nurse
Dudley F. Stegge	Director of College Union
Glen D. Dolence	Director of Athletics
Elmer E. Rodgers	Head Librarian
Ross C. Snyder	Director of Instructional Media
Loretta Frazier	Reference Librarian
Mary L. Dove	Periodical Librarian
Arlene E. Moore	Circulation Librarian
Elizabeth J. Mueller	Processing Librarian
Harry Castor	Purchasing Agent
John Johnson	Personnel Records
Sidney S. Shouse	Chief Accountant
Ronald W. Robson	Director of Placement and Public Information
Donald Cowles	Food Service Manager
Howard Dugan	Superintendent of Buildings and Grounds
B. J. Barnes	Mechanical Engineer
Roy W. Greer	Bookstore Manager
Dale Mooney	Postal Clerk and Duplicating Supervisor
Wallace Matthews	Security Supervisor
* On leave of absence—1971-72	

FACULTY

Leon C. Billingsly President of the College
and Professor of Education
B.S., Southwest Missouri State College; M.S., Kansas State
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and Professor of History
Th.B., A.B., Marion College; M.A., Butler University;
Ph.D., University of Oregon

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** Second Semester

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M.A., Pennsylvania State University

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M.L.S., University of Oklahoma

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and Psychology and Professor of Education
B.S., M.S., Central Missouri State College;
Ed.D., Colorado State College

***Orty E. Orr** Professor of Biology
B.S., Kansas State College of Pittsburg;
M.S., Ph.D., Oklahoma State University

****Barbara K. Pence** Instructor of Business Administration
A.B., M.A., University of Missouri

Russell A. Phillips Assistant Professor of Physics
B.S., Ph.D., Iowa State University

Harry E. Preble Professor of English
A.B., M.A., Ph.D., University of Illinois

Gail K. Renner Assistant Professor of History
B.S., Southwest Missouri State College; M.A., University of
Missouri, Kansas City; M.A., University of Missouri,
Columbia; Ph.D. Candidate, University of Missouri

Dennis H. Rhodes Professor of Speech and Drama
A.B., University of Texas; M.E., University of Houston;
Ph.D., Southern Illinois University

Arshad H. Rizvi Visiting Professor of Sociology
A.B., M.A., University of Karachi (Karachi, West
Pakistan); M.A., Western Kentucky University

Elmer E. Rodgers Head Librarian and Associate Professor
A.B., Youngstown University;
M.S.L.S., Western Reserve University

James N. Roubidoux Instructor of Mathematics
A.B., Ft. Lewis College; M.S., Oklahoma State University

James E. Russell Veterans Counselor
B.S., Kansas State College of Pittsburg

James V. Sandrin Assistant Professor of Education
B.S., M.S., Ph.D., Southern Illinois University

* On leave for post-doctoral studies at Cornell University—
1971-72.

** Second Semester

FACULTY

Delbert F. Schafer Assistant Professor of History
A.B., Southwestern State College; M.A., University of Oklahoma; Ph.D. Candidate, University of Oklahoma

O. L. Schuster Professor of Education
B.S., Southwest Missouri State College; M.Ed., University of Missouri; Ed.D., University of Mississippi

Donald L. Seneker Director of Police Academy and Instructor, Law Enforcement
B.S., Central Missouri State College

R. Clyde Shipley Instructor of Physical Education
B.S., Missouri Valley College;
M.S., Central Missouri State College

Paul R. Shipman Administrative Assistant,
Director of Financial Affairs
and Professor of Education
B.S.E., Southwest Missouri State College; M.S., Kansas State College of Pittsburg; Ed.D., University of Arkansas

Bobbie Z. Short Assistant Professor of English and Speech
B.S., Southwest Missouri State College;
M.S., Kansas State College of Pittsburg

***June H. Simons** Assistant Professor of English
A.B., M.A., University of Oregon;
Ph.D. Candidate, University of New Mexico

F. Joe Sims Assistant Professor of Music
B.M., Southwestern College, Winfield, Kansas; M.A., University of Northern Colorado; Ed.D., Oklahoma State University

Ann M. Slanina Assistant Professor of English
A.B., St. Francis College, Fort Wayne, Indiana; M.A., University of Dayton; Ph.D. Candidate, University of New Mexico

Marion E. Sloan Instructor of Physics
A.B., M.S., Kansas State College of Pittsburg

Ross C. Snyder Director of Educational Media
and Associate Professor of Education
B.S., Taylor University
M.A., Graduate Study, Ball State University

James R. Spradling Instructor of Political Science
A.B., J.D., University of Missouri

Sam J. Starkey Associate Professor of Education
and Psychology
B.S., M.B., Ed.D., University of Arkansas

* First Semester

FACULTY

Annetta E. St. Clair Assistant Professor of Political Science
A.B., M.A., Kansas State College of Pittsburg

Wayne E. Stebbins Assistant Professor of Biology
and Tennis Coach
B.S., M.S., Kansas State Teachers College of Emporia

Bob F. Steere Professor of Education
B.S., Southwestern State College;
M.S., Arizona State College; Ed.D., Utah State University

Dudley F. Stegge Director of College Union
and Assistant Professor of Physical Education
B.S., M.S., Kansas State College of Pittsburg

Daniel R. Stengel Assistant Professor of
Business Administration
B.S., M.A., University of Nebraska

Dorothy A. Stone Associate Professor of
Business Administration
B.S., M.A., University of Missouri

Joseph A. Stout Assistant Professor of History
A.B., Angelo State College; M.A., Texas A & M;
Ph.D., Oklahoma State University

Arthur L. Strobel Assistant Professor of Physics
B.S., Southeast Missouri State College;
M.S., University of Arkansas

Lenard H. Studerus Assistant Professor of Foreign Languages
A.B., University of Seattle; M.A., San Diego State College;
Ph.D. Candidate, University of Colorado

Pudukkottai K. Subramanian Assistant Professor of
Mathematics
B.S., University of Delhi, India; M.A., Miami University of
Ohio; Ph.D., University of Wisconsin

William L. Taylor Head, Department of Music
and Assistant Professor of Music
B.S., M.M.E., University of Arkansas

John W. Tiede Instructor of Business Administration
B.S., Southwest Missouri State College;
M.B.A., University of Arkansas

Curtis J. Twenter Associate Professor of Physical Education
B.S., M.E., Ed.D., University of Missouri

George H. Volmert Registrar; Assistant Professor of Education
B.S., M.A., Northeast Missouri State College

FACULTY

James T. Volskay Assistant Professor of Psychology
B.S.E., Southwest Missouri State College;
M.E., Ph.D., University of Missouri

Charles L. Wade Instructor of Physical Education
B.S., Southwest Missouri State College;
M.A., Northeast Missouri State College

Doris A. Walters Instructor of English
B.S., M.A., Kansas State College of Pittsburg

Phillip R. Whittle Assistant Professor of Chemistry
B.S., University of Kentucky; Ph.D., Iowa State University

Lynn R. Whitworth Instructor of Machine Technology
B.S., Kansas State College of Pittsburg

Robert C. Wiley Associate Professor of Education
B.S., M.Ed., Trinity University;
Ed.D., Oklahoma State University

Harold R. Willis Assistant Professor of Psychology
A.B., George Washington University; M.A., M.S., Jackson
College; Graduate Study, Washington University

W. Ralph Winton Director of Admissions; Assistant Professor
B.S., Drury College; M.E., University of Arkansas

Pauline W. Wolfe Associate Professor of English
A.B., University of Wyoming; M.A., Northwestern
University; Graduate Study at University of New Mexico

Rebekah L. Wood, R.N. Instructor of Nursing
B.S., Marquette University

James S. Worthington Assistant Professor of
Business Administration
B.S., Kansas State College of Pittsburg;
M.A., University of Missouri; CPA

Edward W. Wuch Assistant Professor of Physical Education
and Head Baseball Coach
B.S., M.E., University of Missouri

Venus Yount Assistant Professor of Physical Education
B.S., Kansas State College of Pittsburg;
M.A., University of Arkansas

Donald R. Youst Assistant Professor of Political Science
A.B., M.S., Kansas State Teachers College, Emporia;
Ph.D., University of Nebraska

PART TIME FACULTY

Evelyn F. Ashworth Instructor of Education
A.B., M.A., Ph.D. Candidate, University of Alabama

Nolen W. Berry Instructor of Business Administration
B.S., J.D., University of Missouri

Jerry P. Coburn Instructor of Drafting
B.S., M.S., Kansas State College of Pittsburg

Bill Fellers Instructor of Business Administration
B.S., Kansas State University; M.B.A., University of Tulsa;
CPA

Harriet L. Hobson Instructor of Data Processing
B.S., Missouri Southern College

Richard E. Long Instructor, Health Facilities Management
B.S., University of Akron, MHA Washington University

William N. McDonald, Jr. Instructor of Business Administration
B.S., University of Missouri

Alexander R. Orr Instructor of Philosophy
A.B., M.A., University of Toronto

Hilda E. Richardson Instructor of Education
B.S., Kansas State College of Pittsburg;
M.S., Kansas State Teachers College of Emporia

Robert C. Stringer Instructor of Business Administration
B.S., Missouri Southern State College;
M.B.A., University of Arkansas

Max E. Thompson Instructor of Business Administration
A.B., Baker University; M.A., University of Kansas

H. Waldo Wasson Instructor of Speech
B.S., Northeast Missouri State College; M.A., University of
Missouri; Ph.D., Louisiana State University

Myron P. Winn Instructor of Business Administration
B.S., University of Missouri; CPA

Leo J. Wright Instructor of Data Processing
B.S., Kansas State College of Pittsburg

GENERAL INFORMATION

THE COMMUNITY AND SERVICE AREA

Missouri Southern State College is situated in Southwest Missouri, eleven miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 200,000 people.

The campus, located at the northeast edge of Joplin on 310 acres of gently rolling land, is within commuting distance of a large college population. The college lies at the heart of a cluster of cities with populations up to 45,000. Some of the larger of these cities are Joplin (the largest), Carthage, Webb City, Carl Junction, and Sarcoxie. The college is located in the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

HISTORY

Missouri Southern State College originated in 1937 as Joplin Junior College. It was a part of the Joplin Public School System, but the first year of classes was conducted by the Extension Division of the University of Missouri.

The first year of classes was held in the Joplin Senior High School building. The college moved into its own building at Fourth Street and Byers Avenue on September 6, 1938. After 20 years in this location the college was transferred to 310 West Eighth Street where it continued operation until the close of the 1966-67 academic year. The educational and administrative functions of Missouri Southern State College were moved to the new campus in June 1967. Since that date the college has been functioning in a new, multiple building campus with an enlarged program and student body.

Beginning in 1964, organizational and legal developments took place rapidly. On April 1, 1964 the voters created the Junior College District of Jasper County, naming a six-member Board of Trustees. This act ended the junior college's 27 years of existence as a part of the Joplin Public School System. The new junior college district included Jasper County and parts of three other counties—Newton, Lawrence, and Barton. The institution was renamed Jasper County Junior College.

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Life as a separate junior college district did not exist long. On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 providing for the establishment of a two-year state senior college in Jasper County when the academic facilities of the Junior College District of Jasper County should become available. Anticipating the passage of the House Bill No. 210, the Board of Trustees adopted the name Missouri Southern College in May, 1965.

The legislative act creating the state senior college provided for the administration of the junior and senior college through a governor-appointed Board of Regents. The appointments were made on October 13, 1965, the date that marks the beginning of the operation of Missouri Southern College under the Board of Regents. The law directed the Board of Trustees to assume the responsibility of levying the necessary taxes within the Junior College District of Jasper County which, together with state junior college aid and funds available from other sources, are sufficient to pay the costs of the junior college operation and the costs of any capital improvements for both the junior and senior colleges. The state provides the operating cost of the senior college.

COLLEGE PROFILE

The combining of a two-year locally supported junior college with a two-year state supported senior college makes Missouri Southern State College unique in college history. Although the two programs have separate support, they have one faculty and one administration functioning under the supervision of the Board of Regents appointed by the Governor.

The college has an open-door admissions policy for graduates of Missouri high schools. It offers studies leading to a bachelor's degree in a number of major areas in the liberal arts, teacher education and business administration. In addition, liberal arts and pre-professional transfer programs, technical education and certificate programs are available to students who do not wish to pursue a baccalaureate degree.

COLLEGE PHILOSOPHY AND PURPOSES

Missouri Southern State College is dedicated to the principle of developing a college community where all members are given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing ways to live a better life.

Missouri Southern State College offers a diversity of study designed to satisfy a wide range of student and community interests. The college endeavors to maintain quality instruction at all levels.

GENERAL INFORMATION

Missouri Southern State College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the college also recognizes its responsibility and obligation to serve the needs of the citizens of the Junior College District of Jasper County, Missouri.

The college fulfills its obligation to both state and community by:

- a. Providing a program of general education for all students;
- b. Preparing students for professional and graduate programs of study;
- c. Preparing teachers for elementary and secondary schools;
- d. Preparing students for business, industry, and government;
- e. Providing a variety of technical programs;
- f. Serving as a center for adult education and community activities.

STANDARDS FOR STUDENT CONDUCT

As active members of the college community, students at Missouri Southern State College have the rights and privileges enjoyed by members of all democratic communities. They also have the responsibilities and obligations which accompany these rights. Missouri Southern State College is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color, or national origin; and all members of the academic community are expected to support this principle.

Students have the responsibility of upholding the standards, traditions, and policies of the college which has granted them membership in the academic community at their own request. They also have the responsibility of making maximum use of their abilities, of exercising good judgment, of observing the rights of others, and of adhering to the requirements of adult society.

In addition, the following general policies are in effect:

1. Students have the obligation to obey all rules and regulations and to preserve all property provided for their education.
2. Students are expected to conform to all federal, state and local laws. Gambling, alcoholic beverages, drugs, firearms, ammunition, and explosives are specifically prohibited on college property and in off-campus student living quarters.

GENERAL INFORMATION

3. The conduct of the individual student is an important indication of his character and of his future potential in life. Cheating, falsification of documents and immoral conduct will not be tolerated.

4. Students are expected to conform to the usually accepted social customs of the community.

5. Students shall not engage in or incite others to participate in obstructive or disruptive activities, deprive others of their rights, do harm to other individuals or property, or interfere with college or other officials in the performance of their duties.

6. The College Union of Missouri Southern State College and its facilities are dedicated to and for the primary use of the students, faculty, staff and their authorized guests. Individuals entertaining guests in the College Union are responsible for their proper identification, registration, and conformance to the rules established for such guests. When not in use by campus organizations, off-campus groups may use the facilities of the Union.

7. The facilities of the Residence Halls at Missouri Southern State College are primarily for the use of the residents thereof and their invited guests. The host is responsible for the registration and conduct of his guests. Disciplinary action will be taken against non-residents making unauthorized use of residence hall facilities.

8. The prevention of fire and the safety of others is the responsibility of the individual. Students shall not set off false fire alarms, misuse fire equipment, or refuse to obey lawful directions by fire wardens.

The foregoing shall apply to all student conduct, and failure to observe these standards will constitute basis for disciplinary action, the maximum of which is dismissal from the College. Registration and participation as a student in Missouri Southern State College shall constitute full acceptance of these standards, as well as of all other rules and standards of conduct which have been or may be adopted.

ACCREDITATION AND MEMBERSHIPS

Missouri Southern State College is accredited by the North Central Association of Colleges and Secondary Schools and by the Missouri State Department of Education.

Major memberships include the American Council on Education, the American Association of State Colleges and Universities, the American Association of Colleges for Teacher Education, and the Missouri Association of Junior Colleges.

GENERAL INFORMATION

THE CAMPUS

Missouri Southern State College is located at the corner of Newman and Duquesne Roads near the northeast edge of Joplin. Fourteen new buildings and several remodeled older buildings serve the instructional and student activity needs.

Spiva Library, named in honor of the late M. George A. Spiva of Joplin, a friend and generous supporter of the college, provides an atmosphere which contributes to an intellectual climate. Open stacks, listening laboratories that utilize dialogue equipment, conference rooms, and typing stations provide students with excellent facilities for study and research.

Hearnes Hall is named after the Honorable Warren E. Hearnes, Governor of Missouri, whose understanding of the educational needs of Southwest Missouri made possible the realization of a four-year college program. The building is the administration headquarters and the reception center of the campus. It contains, also, instructional classrooms and faculty offices.

The L. R. Reynolds, Jr., Science and Mathematics Hall provides three large, elevated lecture rooms, regular classrooms, science laboratories, the computer center, and faculty offices. It is well equipped to meet the requirements of science and mathematics programs.

Fine Arts Hall is a complex of two buildings connected by an arcade that serves the areas of Art and Music. The art building includes a large exhibit hall that serves the Spiva Art Center of Joplin as well as the needs of the college.

The Physical Education Building houses the college basketball floor, classrooms, faculty offices, and many facilities for physical education classes.

The College Union serves the total campus with cafeteria, coffee shop, bookstore, lounge areas, Student Senate offices, yearbook offices, faculty lounge, ballroom, etc.

The Business Administration Building is a combination of the old Mansion House and the new building addition. It houses specialized and regular classrooms and faculty offices.

The Barn Theatre is a barn converted into an air-conditioned theatre with classrooms, dressing rooms, costume rooms, ticket booth and foyer.

GENERAL INFORMATION

Kuhn Hall is a new structure that provides facilities for the nursing education program, computer center and the student health center. This building is named after Dr. J. R. Kuhn, Jr., a strong supporter and leader of the nursing education program at Missouri Southern State College. The Student Health Center is located in Kuhn Hall. A full-time registered nurse is on duty and medical doctors from the community provide services at stated hours.

The Technology Building is a new structure that provides facilities and faculty offices for Automotive Technology, Machine Technology, Drafting and Design, and classrooms for other instructional activities.

The College Placement Building is headquarters for the College Placement Services and Alumni Offices. It contains offices, interviewing rooms, and one academic facility — the reading laboratory.

The Police Academy Building is a new structure that houses the Campus Security Office and offices for the director and faculty of the Law Enforcement Department plus specialized classrooms for Academic and Academy programs in law enforcement. A complete photographic laboratory and a criminalistics laboratory are also located in this building.

The Men's Residence Hall houses 212 men. It is an attractive and modern residence hall, completed in the Spring, 1970.

The Women's Residence Hall was also completed in the Spring, 1970, and will accommodate 112 women.

GENERAL INFORMATION

SCHEDULE OF FEES

All fees are due and payable at the time of registration each semester. Registration is not complete until all fees are paid.

The College reserves the right to change fees without notice.

INCIDENTAL FEES:

	Each	Fall and Spring Semester	Summer Term
	8 hours or more	Less than 8 hours	
I. Residents of the Junior College District			
Junior College Division	\$ 95	\$ 9 per hr.	\$10 per hr.
Senior College Division	150	13 per hr.	15 per hr.
II. Residents of Missouri (Outside Junior College District)			
Junior College Division	\$150	\$13 per hr.	\$15 per hr.
Senior College Division	150	13 per hr.	15 per hr.
III. Non-Residents (Out-of-State)			
Junior College Division	\$345	\$22 per hr.	\$25 per hr.
Senior College Division	345	22 per hr.	25 per hr.
OTHER FEES:			
Application for admission	\$ 5.00		
Applied music	32.00		
Change of class schedule	2.00		
Commencement	10.00		
Cosmetology special fees			
First term	120.00		
All other terms, each	70.00		
Laboratory breakage and materials		cost	
Late registration (full time)	10.00		
(part time)	5.00		
Radiologic Technology special fees			
First Term	100.00		
All other terms, each	40.00		
Student activity	5.00		
Textbook rental and service charge (50% refundable):			
Spring and fall semester (over 8 hours)	30.00		
Spring and fall semester (under 8 hours)			
and summer term	6.00 per course		
Towel Fee for physical activity classes	1.25		
Transcripts	1.00		
RESIDENCE HALL COST (Per semester):	\$425.00		
(Summer \$210.00)			

GENERAL INFORMATION

(See detailed explanations below.)

Application for Admission: A non-refundable application fee of \$5.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application.

Applied Music: For one 30-minute lesson per week in applied music, the usual fee is \$32.00 per semester. The fee is paid to the instructor.

Change of Class Schedule: Students are charged \$2.00 for each class change made after classes begin (refer to College calendar). Students registered for 8 or more credit hours before and after the change in schedule will pay only the \$2.00 change fee. Those changing from 7 or less hours to 8 or more hours must pay the full incidental and textbook fees and the \$2.00 change fee. Those who are registered for 8 or more hours and change to 7 or less hours during the change-of-registration week will receive a refund and will be charged by the credit hour.

Commencement: Candidates for the Associate or Baccalaureate degrees are charged a \$10.00 commencement fee. This covers the cost of the diploma, rental of cap and gown, and other commencement activities. The fee is subject to refund only when the candidate fails to qualify for graduation.

Evening Session: Students enrolled in evening classes for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, are subject to the same fees, rules, and regulations of the Day Session. Special fees are announced in the Evening Session Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

Laboratory Breakage and Materials: There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.)

Students enrolled in chemistry are required to purchase a \$10 laboratory breakage card which may be redeemed for this full amount at the end of the semester, providing there has been no breakage or loss on the part of the student.

Late Registration: A late registration fee of \$10 is charged full-time students who register after classwork begins. Five dollars is charged part-time students. This fee is not refundable.

Miscellaneous Fees: Occasionally a fee is charged for classroom materials, such as subscriptions to a periodical, line charges for bowling in physical education, film developing in photo-journalism, or purchase of paperback books in addition to the textbook rental.

GENERAL INFORMATION

Student Activity: This charge is to support activities of the Student Senate and the College Union Board. Students enrolled in less than eight hours during a semester may purchase a student activity ticket at the Business Office.

Summer Session: Rules and regulations which govern admission to the first and second semester during the regular school year shall also apply to the Summer Session.

Textbook Rental and Instructional Services: Students enrolled during a semester in eight or more credit hours pay a \$15.00 non-refundable textbook rental fee (includes normal laboratory fees and cost of service on instructional equipment) and a \$15.00 textbook deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 deposit and \$3.00 rental for each course in which they are enrolled. All summer students pay \$3.00 rental and \$3.00 deposit for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased at the end of the term for full retail price less an allowance for rental charges paid by the student.)

Towel Fee: A \$1.25 fee is charged each semester to students enrolled in "physical activity" classes. A towel and the weekly laundry of it is furnished by the College.

Transcripts: Each student is entitled to two official transcripts without charge. There is a charge of \$1.00 for each additional copy. Payment must accompany the request for each transcript.

REFUND POLICY (Except for Residence Hall Charges)

Students enrolled in the fall and spring semesters who drop out of the College before the fifth week of the semester are entitled to a partial refund of refundable fees. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives the withdrawal form completely and correctly executed. The refund schedule is as follows:

Within the first and second weeks	80 per cent refund
Within the third and fourth weeks	50 per cent refund
After the fourth week	No refund

Summer term refunds are as described above, except that no refunds are given after the third week.

GENERAL INFORMATION

RESIDENCE HALL COST

Charges of \$425.00 per semester will be made and will cover both room and board. Twenty meals per week will be furnished. Charges may be paid in full or in four installments per semester. These are to be paid in the Business Office. Should a student elect the installment method of payment, a ten dollar per semester service charge will be assessed. Payments will be due as follows:

First Semester		Second Semester	
August 1	\$120	January 1	\$120
October 1	105	February 1	105
November 1	105	March 1	105
December 1	105	April 1	105

Summer Residence Hall Cost. The board and room charge for the summer session is \$210, which includes 15 meals per week, and payment must be made by June 1. Monthly payments may also be made in \$105 amounts by June 1 and July 1.

Application Procedure. All applications for the residence halls should be sent to the Director of Housing, Missouri Southern College. Applications will be processed as soon as the following requirements have been met.

1. The prospective student must file an application for admission to the college, pay a \$5.00 application fee, and be tentatively accepted by the Director of Admissions.
2. An Application-Contract, Residence Hall Information Card, and a \$40.00 Security Deposit must be filed with the Director of Housing.

The \$40.00 Security Deposit is not to be construed as partial payment for the cost of room and board. This deposit will normally be returned at the completion of the academic year or at the end of the summer term.

If notification for a cancellation of a room reservation is not received by the Director of Housing on or before July 31 for the fall semester, the Security Deposit is forfeited and no longer refundable. For the summer term, steps 1 and 2 should be completed before May 15. Cancellations for summer residency must be made before the date for summer enrollment in order to receive a refund of the \$40.00 deposit.

Missouri Southern State College is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color, or national origin.

STUDENT PERSONNEL SERVICES

The maximum intellectual growth and personal development of the college student is a combination of academic study and participation in out-of-class activities. Therefore, the educational program of Missouri Southern State College includes all student-college relations in addition to formal instruction.

The student personnel services are designed to supplement, complement, and implement the academic program of the College.

FINANCIAL AIDS

MISSOURI SOUTHERN STATE COLLEGE ACADEMIC SCHOLARSHIPS

General Information

All qualified applicants for financial aid and scholarships will receive consideration without regard to race, creed, national origin or color.

Listed below are the scholarships that will be awarded by Missouri Southern State College for the 1972-73 academic year. Write for scholarship applications to:

OFFICE OF FINANCIAL AIDS
Missouri Southern State College
Joplin, Missouri 64801

THE REGENTS AND TRUSTEES SCHOLARSHIPS

The President's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the first and second ranking students in the eight high schools located in Jasper County.

The Dean's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the students in the upper ten percent of their graduating classes. The college grants scholarships on the basis of one for each fifty students in a graduating class.

Missouri Southern State College Patrons' Scholarships

The following scholarships have been made available by interested individuals, service organizations, business firms, industries, and local civic organizations:

STUDENT PERSONNEL SERVICES

SCHOLARSHIP DONORS

Donor	Number of Scholarships	Value of each Scholarship
American Association of University Women	2	\$200
American Business Women's Association		
of Carthage	2	\$200
Dorothy Stephenson Memorial	5	\$200
Anonymous No. 1	2	\$250
Anonymous No. 2	3	\$100
Anonymous No. 3	1	\$200
Anonymous No. 4	1	\$100
Anonymous No. 5	1	\$200
Association for Childhood Education		
(Joplin)	1	\$200
Auxiliary Jasper County Medical Society	3	\$200
Bank of Carthage	1	\$200
Russell Belden Memorial	4	\$200
Briarbrook Men's Golf Scholarship	2	\$150
Mr. and Mrs. Earl Campbell	1	\$100
Central National Bank of Carthage	1	\$200
Bob Chaplin Memorial	1	\$200
Citizens Bank of Carl Junction	1	\$200
Ada Coffey	2	\$150
College Players	4	\$200
Commerce Bank of Joplin	1	\$200
Community National Bank of Joplin	1	\$100
Electric Motor Supply	1	\$200
Frederick Eliscu, M.D. Memorial	1	\$470
Empire District Electric Company	10	\$200
Engineering—Math—Physical Science	1	\$200
Exchange Club of Joplin	1	\$300
Fifteenth Street Lumber Company	1	\$200
First National Bank of Sarcoxie	2	\$200
First State Bank of Joplin	1	\$200
Forty and Eight	1	\$ 50
Edna F. Gaither	2	\$200
Burl Garvin	2	\$100
Gilmarbeck Music Scholarship	1	\$200
Mr. and Mrs. Harry Gockel	1	\$200
Charles O. Gosch Memorial	1	\$250
Joe Harding Supply Company	1	\$200
Hertz Rent-A-Car	1	\$200
Missouri Southern College Art League	1	\$100
C. C. Ivie Memorial	1	\$ 50

STUDENT PERSONNEL SERVICES

Robert Higgs Memorial	1	\$200
Mrs. Dorothea Hoover	1	\$200
Horton Golf Association	1	\$200
Jasper County Medical Society	2	\$200
Jasper County Insurance Agents	3	\$200
Jefferson Lines Inc., Div. of Crown Coach	2	\$200
Joplin Association of Educational Secretaries	2	\$ 50
Joplin Board of Realtors	2	\$200
Joplin Business and Professional Women's Club	1	\$200
Joplin Downtown Lion's Club	1	\$300
Joplin Federal Savings and Loan	1	\$200
Joplin Furniture Company	1	\$200
Joplin News Company	1	\$100
Joplin Rangeline Lion's Club	1	\$240
Joplin Rotary Anns	2	\$200
Joplin Rotary Club	6	\$200
Joplin V.F.W. Post 544	1	\$300
KFSB—Spiva Memorial	1	\$160
Martin Luther King, Jr. Memorial Scholarship	3	\$500
Kiwanis Foundation of Joplin—International Student Scholarship	1	\$800
Kiwanis, Women of Joplin	1	\$200
KOAM-TV	1	\$200
KODE-TV	1	\$200
KQYX	1	\$200
Harry H. Landrith Memorial	1	\$540
Math League	2	\$200
Merchants and Miners Bank of Webb City	1	\$200
Mid-Western Machinery Company	2	\$200
Missouri Federation of Women's Club (7th District)	1	\$115
Missouri Southern State College Alumni	2	\$200
Missouri Southern Faculty Wives	1	\$200
Missouri Southern Student Senate	1	\$200
Newton's Jewelry	1	\$200
Florence Nightingale	1	\$305
Pilot Club of Joplin	5	\$200
Professional Food Management	5	\$100
R. C. Ramsey Memorial	1	\$300
American Business Women Assn. of Joplin	2	\$200
Henry Hornsby Memorial	1	\$250
William F. Netzeband	1	\$150

STUDENT PERSONNEL SERVICES

L. R. Reynolds, Jr. Memorial	1	\$200
Security National Bank of Joplin	1	\$200
William H. Sisk Memorial	1	\$150
Soroptimist Club of Carthage	1	\$200
Soroptimist Club of Joplin	1	\$200
Student National Educ. Assoc.—		
Lloyd Dryer	2	\$100
Lela A. Smith	1	\$200
Roland T. Smith	1	\$100
Southtown Meat Company	1	\$200
Dan L. Stanley Memorial	1	\$200
George A. Spiva Memorial	1	\$500
St. John's Medical Center Auxiliary	1	\$300
Vera Steininger Memorial	1	\$140
Dr. A. P. Thompson	1	\$100
Union Transfer and Storage	1	\$100
Dennis Weaver Scholarship	2	\$250
Dr. and Mrs. John Windle	1	\$200
Welcome Wagon Club	1	\$200
Webb City - Carl Junction Rotary Club	2	\$200

SPECIAL AWARDS

Edna C. Drummond Memorial Scholarship. The intent of this scholarship is to give appropriate recognition for academic excellence and for the purpose of assisting students in the science department. The number of scholarships awarded each year varies. Miss Drummond was a former instructor of Joplin Junior College from 1938 to 1955.

Spencer F. Bartlett Respect Award: The intent of this award is to give special recognition to a graduating male and female student who has the greatest respect for God, U. S. of America, and has maintained average grades or better while attending Missouri Southern State College. The amount of the award varies each year.

PERFORMING AIDS & AWARDS

Awards are made to individuals who have demonstrated success or high potential in basketball, football, music, dramatics, math, forensics and journalism. These individuals must show satisfactory progress in these college performance areas in order to continue the aid. Applications for performing aids should be made to the director or sponsor of the particular activity.

Basketball Coach	Director of Math League
Football Coach	Director of Music Activities
Dramatics Coach	Director of the School Paper
Forensic Director	(Chart)

STUDENT PERSONNEL SERVICES

WORK

Student Employment

The college Student Employment program is a work program set up by the college to assist those students who desire employment while attending school. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during the vacation periods. Preference is given to those students who are qualified to fill the job openings and have had experience in fields related to the job openings. Employment is on campus only.

Federal Work-Study Program

The Federal Work-Study program is a program whereby students who must have a job to help pay for college expenses may be employed by the college or certain other non-profit agencies. Preference must be given students from low-income families. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during Summer and other vacation periods when they do not have classes.

LOANS

Nursing Loan

This program has been established to assist those students who wish to complete requirements for nursing. Maximum amount loaned per year is \$1500. These loans are given at three percent (3%) interest. Interest begins nine months after the student leaves school. This loan has a cancellation clause. (See Financial Aids Office.)

Law Enforcement Loan

This program has been established to encourage students to enroll in the Law Enforcement Program. These loans carry an interest rate of three percent (3%), with special consideration given to law enforcement officers who are presently employed full-time.

National Defense Student Loans

High school graduates who are accepted for enrollment at Missouri Southern State College and who need financial assistance to pay enrollment fees and other costs are eligible for student loans. The loans bear no interest until nine months after the student ends his studies. This applies whether the individual remains a student at Missouri Southern State College or transfers to another institution. Nine months after the student ceases his studies the unpaid balance of the loan begins to draw interest at the rate of three percent (3%) per year. Repayment of the

STUDENT PERSONNEL SERVICES

loan may be as low as \$15.00 per month and, depending on the amount of the loan, may be extended over as much as a ten-year period. If a borrower becomes a fulltime teacher in an elementary or secondary school or in an institution of higher education, as much as half of the loan may be forgiven at the rate of ten percent (10%) for each year of teaching service. Repayment of these loans may be deferred up to a total of three years while a borrower is serving in the Armed Forces, with the Peace Corps, or VISTA.

Federally Insured Student Loans

The Federally Insured Loan Program is administered jointly by the college and various banks and other financial institutions. Under this program a student may borrow from a bank or other financial institution. A student from a family with an adjusted income of less than \$15,000 a year pays no interest while attending an eligible college, business college, or technical or vocational school. Repayment of principal and seven percent (7%) interest begins when the student ceases his course of study. Present regulations stipulate that repayment begins between the 9th and 12th month and is normally scheduled for repayment from 5 to 10 years. There is, however, a minimum monthly payment requirement of \$30 that could reduce the number of years for repayment.

Educational Opportunity Grants

Missouri Southern State College has funds for a limited number of Educational Opportunity Grants. Under this program grants may be awarded to students with exceptional financial needs.

Students who have received EOG funds in prior semesters at Missouri Southern State College or other institutions will be given preference. This type of financial assistance must be matched with other types of aid such as scholarship, work, or loans.

Small, Short-Term Loans

David Pearl B'Nai B'Rith Loan Fund

This fund was established in memory of David Pearl, a member of the above fraternal organization.

Mitchell Loan Fund

This fund was established in memory of Thomas Mitchell.

Joplin Business and Professional Women's Club Loan Fund

This fund was established to assist students in need.

STUDENT PERSONNEL SERVICES

Arnold E. Irwin Loan Fund

This fund was established in memory of Mr. Irwin who was a faculty member of Joplin Junior College.

Patricia Smith Memorial Loan Fund

This loan fund was established in 1969 in memory of a former Missouri Southern State College student by the Joplin Exchange Club and friends.

Edna F. Gaither Memorial Fund.

This fund was established in memory of Edna F. Gaither who was a teacher in the Joplin school system for 50 years.

Telephone Pioneers of America Loan Fund.

This fund was established to assist students who need financial assistance for the academic year.

Joplin Rangeline Lions Club Emergency Loan Fund.

This fund was established to help students who have an emergency. These funds are available immediately and were provided by the Lions Club so that the problems of finance would not be a part of the student's emergency.

How to Apply for Financial Aid

1. Complete the admission application form and pay the \$5.00 admission fee.
2. Complete the financial aid application that pertains to the type of aid you are requesting.
3. You are required to file your 7th semester transcript only when you are applying for scholarships. If you are a transfer student, you must submit a transcript from the school you last attended.
4. In order to complete admission requirements, you must send to the admissions office upon graduation your completed 8th semester transcript.

Applicants for financial aid must have completed a satisfactory financial aids program well in advance of each semester's registration and have on file in the Financial Aids Office all application forms.

Applications for Performing Aids and Awards should be made directly to the faculty member in charge of the program.

For further information regarding financial aid write or call:

OFFICE OF FINANCIAL AIDS
Missouri Southern State College
Newman and Duquesne Roads
Joplin, Missouri 64801
417 624-8100

STUDENT PERSONNEL SERVICES

Residence Facilities

Limited college residence facilities are planned for those who are enrolled as full-time students in Missouri Southern State College.

Two permanent residence halls, one with 212 accommodations for men and one with 112 accommodations for women, are available. They are located at the heart of the campus near the new College Union, the library, classrooms, and the gymnasium.

The large first floor lounge and recreation areas are the central features of each building. A complete vending machine complex, a library, and study areas are available on the first floor of each of these buildings. Each room will have beds, closets, built-in desks and desk chairs. Coin operated laundry facilities are available in the halls. Private telephones may be installed in each room with the occupants assuming responsibility for the installation charges plus the monthly telephone bill.

Contractual Arrangements for Residence Halls

An application and contract accompanied by a \$40 security deposit fee is required for reservation in a College residence hall. This is a combined contract for room and meals. The \$40 security deposit is forfeited if the contract is cancelled after July 31 for the fall term, or in case of new student, after December 31 for the spring term. The College retains the \$40 as a security deposit as long as the student is in residence and this deposit is not applicable to the housing account. The deposit will be refunded upon termination of the contract if all terms of the contract are fulfilled.

This contract is effective for the entire academic year (fall and spring semesters); or is effective for the remaining portion of the academic year when entered into after the beginning of the fall term.

A student may request cancellation of the contract at the end of a term because of completion of graduation requirements or if an emergency beyond his control necessitates his withdrawal from school. If this request is filed with the Housing Director at least 30 days before the end of the term, and if approved, the deposit may be refunded unless there is a damage charge, outstanding account, or other violation of the contract. Students should refer to contract for detailed terms.

The College reserves all rights in connection with room assignments which are made in the order in which applications are received. Students' preferences are considered, but there can be no guarantee that assignments will be made in accordance with the preferences.

The residence halls and food services are operated on a non-profit basis by the College, and the established rates are subject

STUDENT PERSONNEL SERVICES

to change by action of the Board of Regents. Twenty meals are served each week.

Residence hall rooms may not be occupied by students earlier than 24 hours before they are required by the College to be in attendance. Students are to vacate rooms 24 hours after the term officially closes.

Reservations in residence halls are not held beyond 36 hours after the student is required to be on campus unless special arrangements have been made with the Housing Director.

The College is not responsible for the loss of, or damage to, any personal property of students. Parents should arrange for insurance coverage of personal property within the framework of their regular household policies.

Housing and Food Service Rates

The following rates are based on advance payments for the semester. Payments on any other basis must be approved by the Business Office

	Board and Room Per Semester
Men's Residence Hall	\$425.00
Women's Residence Hall	\$425.00

College Union

The College Union is a social, cultural, recreational, and service center for student, faculty, and alumni. The activities in this building are planned and directed by the College Union Board.

On the ground floor are located various offices, the bookstore, the lounge, and a snack bar.

The ballroom and special meeting rooms are located on the upper level of the College Union.

The cafeteria, the faculty lounge, and the food service offices are located on the main floor. An elevator connects the three floors.

Social Standards

A student attending Missouri Southern State College is expected to maintain a high standard of moral conduct. Forfeiture of the privilege to attend may result from unsatisfactory conduct. Students are expected to demonstrate maturity in their judgment.

Appropriate dress is expected on the campus during the regular school day.

Missouri Southern State College does not permit the use of alcoholic beverages on campus. Any violation to this rule is subject to disciplinary action.

Smoking is prohibited in the library and in classrooms.

STUDENT PERSONNEL SERVICES

Career Counseling and Placement Services

The Placement Office, usually associated with the task of matching people and jobs, offers an equally important service through career counseling, aiding students in clarifying their educational and vocational objectives. An understanding on the part of the student of his interests, aptitudes, limitations, etc. and a knowledge of the world of work makes matching an individual's qualifications with a job much easier and certainly more gratifying to all parties concerned. Students are invited to use career counseling and placement services early in their pursuit of a formal education.

Although Missouri Southern State College is considered to maintain centralized placement services, the Placement Officer coordinates the functions of his office with other guidance and counseling services available to students on campus. The services more specifically related to finding employment are centered in the Placement Office.

A collection of information folders supplied by major business establishments, industries, governmental agencies and educational institutions are made readily accessible in the Placement Office Library. A record of current information on job opportunities and announcements of on-campus interviews is either posted on bulletin boards or bound in notebook form for student use. Students are invited to visit the Placement Office regularly.

Candidates for graduation must register with the Placement Office. Registration involves answers only to several basic questions. Since employers usually request credentials of a potential employee before making final judgment on their selection, most graduates will want to develop a set of credentials for the Placement Office files. The Placement Office personnel provide assistance in the development of credentials. Credentials are retained in the Placement Office files indefinitely and may be updated, declared inactive or activated only by the student upon written request.

Student Health Center

A new Student Health Center has just been completed and is now staffed by a part-time physician and a full-time registered nurse. This new facility was designed with the latest health techniques in mind.

The out-patient clinic hours for the 1971-72 school year will be announced in September. No charge will be made for service during these hours but students are expected to pay for drugs, EKG's, X-rays, ambulance service or minor surgery, except where covered by any insurance the student or his family may have. The College reserves the right to adjust benefits to the

STUDENT PERSONNEL SERVICES

students within the limits of the funds made available for the health services through incidental fees paid by students.

Student Insurance

A voluntary accident and sickness insurance plan for students at Missouri Southern State College is available. It is designed as a supplement to the health services already offered to all full-time students through the Health Center. This voluntary insurance program also covers emergencies and provides further protection while the student is away from the campus on weekends or on vacation, including the summer months.

The Counseling Center

The Counseling Center is located in the office complex, 300, third floor, Hearnes Hall. The services of the Center are available without cost to Missouri Southern State College students.

Assistance is offered the student in dealing with personal, educational and vocational problems which may keep him from making optimum use of his potentialities while in college. A professionally trained counselor will work with the individual to assist him in integrating personal, educational, and vocational aspects of this life into a pattern which is meaningful and satisfying.

Veterans

The College is approved by the Veterans Administration to offer programs for veterans eligible under the provisions of Public Laws No. 894 and No. 550, and for those attending under the War-Orphans Act: Public Law 634.

Selective Service

Each male student who wishes to apply for college educational deferment should complete form 109 at registration, or at any other time he selects. The college certifies the student status and forwards the Student Educational Deferment Form 109 to the student's draft board.

STUDENT AFFAIRS

Opportunities for participating in a wide variety of out-of-class activities are provided at Missouri Southern State College. Students are encouraged to investigate the wide choice of activities and are invited to participate in one or more of these aspects of the College program.

Student Senate. The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern State College student government will be proportionate to the participation by the students.

STUDENT PERSONNEL SERVICES

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution.

The membership of the Student Senate consists of the Student Body Executive Officers, the officers from each class, and a number of senators representing each class. The student body executive officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office.

College Union Board. The activities in the College Union are planned and directed by the College Union Board. The College Union Board, composed of eight students and three faculty members, serves as an advisory board to the College Union Director.

The College Union Board began functioning in September, 1969. The Union Board has four major committees: cultural affairs, forum, recreation and films, and dance. The College Union Director, with the aid and advice of the College Union Board, attempts to provide varied activities for the student body.

Students serving on the College Union Board are elected each spring. Qualified students are urged to file for election to these offices. The Dean of Women, Dean of Men, and one faculty member, appointed by the Dean of Student Personnel Services, complete the eleven member board.

Student Cabinet. The Student Cabinet organized each spring is composed of a representative from each authorized student organization together with the student senate officers. This group acts in an advisory capacity to the student body president during the summer and the next regular school year. In addition, the Student Cabinet functions as a service committee from the end of the spring term until the time that the senate is fully organized in the following fall. During the summer months the Cabinet assumes the power and duties of the student senate; thus, it is often referred to as "The Summer Cabinet." At the beginning of each new school year, the Cabinet helps with the orientation program for new students; and before the Cabinet retires to its advisory role, it is responsible for conducting the elections of class officers and of student senators.

STUDENT ORGANIZATIONS

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may

STUDENT PERSONNEL SERVICES

be established when approved by the Student Government and the College administration.

Student Government

Senate
Summer Cabinet
College Union Board
Association of Women
Students

Classes

Senior Class
Junior Class
Sophomore Class
Freshman Class

Departmental Groups

Art Club
Association for Childhood
Education
Auto Technology Club
Biology Club
Business Club
College Players
Engineers Club
Epsilon Gamma
Mathematics Club
Modern Language Club
Lettermen's Club
Psychology Club
Society For the Advancement
of Management
Sociology Club
Student National Education
Association
Student Nurses Association
Rho Epsilon Chi
(Physical Education)

Honor Groups

Alpha Psi Omega
Phi Theta Kappa

Religious Organizations

Baptist Student Union
Ecumenical Council
Inter-Varsity Christian
Fellowship
Koinonia
Young Women's Christian
Association

General and Service

Organizations

Afro-American Society
Alpha Phi Omega
Cheerleaders
Circle K Club
Council on
International Relations
and United Nations
Affairs (CIRUNA)
Flying Club
Rotaract
Young Democrats Club
Young Republicans Club

Social Fraternities

Mu Sigma Gamma
Kappa Alpha

Social Sororities

Delta Phi Delta
Delta Gamma

STUDENT INTERESTS

Athletics. Missouri Southern State College, having become a four-year institution as defined by athletic associations, has received membership in the National Association of Intercollegiate Athletics. The college participates in the following intercollegiate activities: basketball, football, track, baseball, golf, and tennis.

To be eligible for participation, students must meet the scholastic requirements of the NAIA.

STUDENT PERSONNEL SERVICES

The Chart staff publishes 18 issues of the College newspaper. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, and typists. The business staff offers experience in advertising, salesmanship, and secretarial practices. Those wishing to freelance should attend weekly staff meetings.

Debate. A forensics program featuring college debate offers opportunities to any student interested in argumentation. An intercollegiate debate team was first organized in the fall of 1970.

Music. Participation is offered to students by five musical organizations. Choir and Vocal Ensemble are open to all students with consent of the director. Auditions for the Choir are held at the beginning of each semester. Activities include concerts, performances for civic clubs and area schools, and tours. The Vocal Ensemble is a small select group that performs for civic programs and at special recitals.

The Concert Band, Stage Band, and Symphony Orchestra are offered to all students who have the instructor's consent. Concert Band performances include two major concerts each year. The Stage Band is a limited membership group with activities that include at least two formal appearances each year, participation in Jazz Festivals, performances at assemblies, and for civic groups. The Symphony Orchestra is composed of outstanding college instrumentalists and area adult musicians. The group will give five concerts each school year, performing standard orchestral literature.

Theatre. The speech and drama department sponsors four major drama productions in the campus theatre for which all MSC students are eligible to try-out. Advance announcement is made before each try-out. In addition to the major productions, there are experimental and reader's theatre presentations and performing workshops. Sponsored by the local chapter of Association for Childhood Education and presented by the speech and drama department, a series of children's plays are presented each year at the local junior high schools. Try-outs for these are open to every full time MSC student in good academic standing.

ACADEMIC REGULATIONS

Admissions

Admission Requirements.

By Graduation from Accredited High Schools.

1. Missouri Southern State College considers for admission all applicants who are graduates of Missouri public high schools. It considers equally those who are graduates of private high schools that have North Central Association accreditation. Students from other high schools may be considered for admission on an individual basis. If the applicant's grades and test scores indicate unpreparedness to do college study, Missouri Southern State College reserves the right to reject the student, or to require him to take college preparatory courses before admission can be considered.
2. A student entering from out of state must rank in the upper two-thirds of his high school graduating class.

By Examination.

1. Applicants not eligible for admission on the basis of graduation from an accredited high school may be considered for admission on the basis of examinations. Arrangements should be made with the Director of Guidance and Testing.
2. Persons of high school age are not eligible under this provision.

By Advanced Standing (Transfer) from Accredited Colleges.

1. Students applying for admission as transfer students from other collegiate institutions must have official transcripts sent to the Director of Admissions by the Registrar from each institution attended. These transcripts become the property of Missouri Southern State College.
2. Students who are ineligible to return to their last institution will not be admitted to Missouri Southern State College.
3. Students seeking admission from other colleges with 55 transfer credit hours or more, must present a minimum C (2.0 on A=4) average.

Credentials Required for Admission

- I. Students with no college experience are required to furnish credentials as follows for admission to the freshman class:
 1. High School Transcript. An official transcript or transcripts of high school credits showing that he has met requirements for graduation.
 2. Application. The application for admission must be completed one week before the first day of registration.

ACADEMIC REGULATIONS

(See college calendar, Page 4. This includes all credentials required by the admissions office.

3. Application Fee. A fee of \$5.00 with the application for admission. (This fee is non-refundable and non-applicable to other college fees.)
4. Physical Examination. A certificate of health filled out and signed by both the applicant and his doctor.
5. Missouri Southern State College will require additional credentials from students whose application credentials raise questions about their acceptability into the student body. While the college makes every effort to give each applicant an opportunity for a college education, it reserves the right to deny admission when the college's ability to meet the need of the student and/or the welfare of the student body are in question.
6. Students who do not attend Missouri Southern State College within two (2) years after making application, must submit new credentials when seeking admission again.
7. Applicants for Admission to Nursing Program. Students who plan to enroll in the nursing program, in addition to supplying the above credentials, must take an Entrance Examination for Schools of Nursing, and must have an interview with the Director of Nursing.
8. Veterans who plan to attend under the G.I. Bill of Rights or veterans' orphans under the War Orphans Act must present a certificate of eligibility at the time of registration.

II. Students transferring from other colleges must present the regular credentials listed above for freshmen plus:
College Transcripts. Official transcripts and statements of honorable dismissal from each institution attended after high school graduation.

III. Former Missouri Southern State College, Junior College of Jasper County, and Joplin Junior College students must inform the Office of Admissions of their intention to return. When necessary, these students will be required to update their credentials.

Placement Tests.

Scores from the Missouri College English Test (MCET), Missouri Mathematics Placement Test (MMPT), and the School and Ability Test (SCAT). (These tests are administered by colleges throughout the State of Missouri both during the spring and summer of each year. In unusual circumstances the tests may be administered by appointment at Missouri Southern State

ACADEMIC REGULATIONS

College.) Frequently, transfer students who have satisfactorily completed one full semester of college study (16 semester hours) or more need not take the placement tests. The College reserves the right, however, to require the taking of the placement tests if it believes it is necessary for the best academic advisement of the student.

International Students

Students not citizens of the United States, who wish to apply for admission, should write the Director of Admissions, Missouri Southern State College, for the proper application forms and instructions. Three basic concerns apply to international student applicants: (1) Academic competency; (2) Ability to read and speak the English language adequately for college level study; and (3) Ability to finance the cost of education at Missouri Southern State College. All applicants from non-English speaking countries must pass the Test of English as a Foreign Language.

Transcript of Record

An official transcript of the student's academic record bears the registrar's signature and the college seal. Missouri Southern State College assumes no responsibility for the accuracy of a transcript after it leaves the registrar's office.

Up to two weeks must be allowed after the close of a semester for the issuance of an up-to-date transcript. The transcript request must be made in writing. Each student is entitled to two (2) free transcripts. Additional copies cost \$1.00 each. No transcript will be issued unless all bills to Missouri Southern State College are paid or are current according to agreement with the business office.

Grade Reports

Grade reports are normally available within one week after the semester closes.

Academic Advising

Academic advising is regarded by the college as an extension of the teaching function and an important responsibility of the faculty. The student also is responsible to study the requirements of his educational program carefully and work closely with his adviser.

Freshmen students are advised by counselors of the Student Personnel Services. Those who have or will have completed 29 or more semester hours in their current semester will be assigned to and advised by a subject matter professor at the time he pre-enrolls for the next semester.

ACADEMIC REGULATIONS

Course Numbers and Levels

Course Numbers:

- 0 - 99 Not applicable toward baccalaureate degree.
- 100 - 199 Primarily for freshmen.
- 200 - 299 Primarily for sophomores.
- 300 - 399 Primarily for juniors.
- 400 - 499 Primarily for seniors.

Normally courses numbered 100 - 299 are considered junior or lower division level courses, and those numbering 300 - 499 are senior or upper division level courses. There are more significant distinctions between the sophomore and junior years than within the levels of the lower or upper divisions.

Hyphenated numbers (101-102) represent sequence courses, both parts of which must be taken to receive credit. Comma courses (101, 102) sometimes permit taking either semester for credit, but usually allow credit for the first semester without taking the second. The student should check the catalog description of the course to see whether the second semester of a sequence course makes the first semester prerequisite.

Freshmen are not permitted to take any course above the two hundred level unless qualified by advanced placement tests. The exception is infrequent.

Course numbers ending in "0" may be offered each semester. Those ending in an uneven number (example: 101, 103, etc.) are normally offered the first semester, and those ending in an even number (example: 202, 204, etc.) are normally offered the second semester.

CLASSIFICATION OF STUDENTS

Freshman: 0 - 28 hours

Sophomore: 29 - 55 hours

Junior: 56 - 89 hours

Senior: 90 and above

Special: Non-degree students, usually 21 years of age or over, admitted on the basis of maturity and ability, but who fail to meet regular-standing requirements or who plan to study for personal improvement only. These may qualify for regular standing by removing entrance deficiencies and by earning a minimum C (2.0) average. Normally, there is a 32-hour limit. Credits earned as a special student may apply toward a degree when regular standing is attained and if the credit earned is regularly applicable toward a degree. Students who have attempted a degree program and have failed to maintain

ACADEMIC REGULATIONS

normal progress toward graduation may, at the discretion of the proper college authorities, be directed into non-degree, occupational preparation programs as special students.

Post Graduate: Persons having completed a degree but taking courses for purpose of teacher certification, job preparation, an additional degree, or personal profit.

Transient: Students in good standing at other colleges and universities wishing to enroll at Missouri Southern State College for the purpose of transferring back to their institutions the credit earned. Admission requires completion of the application form, payment of the \$5.00 application fee, and a statement of good standing from the Dean or Registrar of the student's home college or university.

Full-time: A student enrolled for 12 or more semester hours.

Part-time: A student enrolled in 11 or less semester hours.

GRADING SYSTEM

Grade	Grade Points
A — Superior	4
B — Above Average	3
C — Average	2
D — Minimum Passing	1
F — Failing	0
W — Withdrawal	0
I — Incomplete	0
Au — Audit (registration without credit)	
Cr — Credit (course passed with no specific grade)	

An incomplete must be made up by the end of the next regular semester or it will be automatically converted into an F. The student is to arrange with his professor the work essential to change the incomplete into a regular grade. Both credit and grade points are suspended until the incomplete (I) is converted to either a passing grade or an F.

A grade point average (GPA) at the end of any semester is the total number of grade points earned divided by the total number of hours attempted.

HONOR ROLL

Dean's Honor Roll—To be placed on the Dean's Honor Roll, the student must be an undergraduate in regular standing and earn a minimum of 3.5 out of a possible 4.0 points on twelve or more semester hours during the fall and/or spring semesters.

ACADEMIC REGULATIONS

GOOD STANDING AND ELIGIBILITY

Students enrolled at Missouri Southern College are in good academic standing when they meet the normal progress toward graduation as described below. Those falling below the prescribed norm will be placed on academic probation. Persons failing to achieve normal progress toward graduation during the probationary period are subject to academic suspension.

Those students competing in intercollegiate athletics or in organizations representing the college off campus are ineligible to participate in these programs when they fall below the norms set for minimum standards of progress.

STANDARDS OF PROGRESS TOWARD GRADUATION

A student's cumulative grade point average (GPA) is used to evaluate his progress. If the grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Progress toward a degree is computed on the following grade point averages:

FOR ASSOCIATE DEGREE CANDIDATES

Hours Attempted	Grade Point Average
1- 17 semester hours	1.5
18- 33 semester hours	1.6
34- 43 semester hours	1.75
44- 55 semester hours	1.9
56 and above	2.0

FOR BACCALAUREATE DEGREE CANDIDATES

1- 17 semester hours	1.5
18- 33 semester hours	1.6
34- 46 semester hours	1.75
47- 62 semester hours	1.8
63- 77 semester hours	1.85
78- 93 semester hours	1.9
94-107 semester hours	1.95
108 and above	2.0

ACADEMIC PROBATION, SUSPENSION AND REINSTATEMENT

Each student should consider a grade point average of less than 2.0 as a warning.

Those falling below the standards of progress toward graduation will be placed on academic probation. If the grade point average is not raised to the minimum standard of progress during the probationary semester, the student is subject to immediate academic suspension from the college.

ACADEMIC REGULATIONS

A student receiving academic suspension must stay out of Missouri Southern State College one semester. Toward the close of the semester he may apply to the Director of Admissions for reinstatement. This petition must be completed two weeks before the first day of registration for the next semester. The Director of Admissions, within the framework of College policy, will notify the student whether and on what conditions he can be readmitted. Readmission will be considered only in cases where the student can present positive evidence that indicates a high probability of future academic success. The grade points needed to reach minimum progress toward graduation must be within the student's capability.

REPETITION OF COURSES

A course in which a student has made a grade of D or F may be repeated only once. The grade and grade points in the first attempt will be cancelled and the second grade will be used in computing grade point averages.

STUDENT COURSE HOUR LOAD

Registration for 12 or more semester credit hours gives full-time standing, and 15 or 16 hours constitutes a normal study load. An average of 15 credit hours for four semesters and 16 for four semesters enables the student to meet the minimum 124 credit hour requirement for a baccalaureate degree in eight semesters (four academic years).

Permission to carry 17 credit hours may be granted if the student's accumulative grade point average is 2.0 or above. In order to carry 18 or more credit hours the student must secure the approval of the chairman of the division through use of a "Petition for Additional Hours." Approval to carry 18 hours or more will be considered if the grade point average is 3.0 or more, freshmen orientation excluded.

In planning a course load, the student should remember that for each hour of credit two hours of study are required per week. A 16-hour load means that a student is committing himself to a 48-hour academic week: 16-18 hours in class, and 32 hours of preparation. The student should carefully measure the demand on his time for money-earning jobs, extracurricular activities, participation in collegiate sports, drama and musical productions, social activities and other time-consuming activities when planning his class schedule.

CLASS ATTENDANCE

The primary objective of student and professor is the student's attainment of course goals. It is recognized that normally those students who achieve well are regular in class attendance. The

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professor, when giving a final semester grade, bases his evaluation on how well the student has achieved the course goals.

The student who misses a class does it at his own risk. He must assume the responsibility for work missed because of class absences. Professors are willing to assist students whose absences are caused by valid illnesses, college approved activities, and extenuating circumstances. The professor may require whatever evidence he needs to support the reason for absence. If a student is absent two class meetings more than the credit hours of the course, regardless of the reason, the professor can request that the student be dropped from the course.

Because the attendance record is significant to the total record and useful in guidance and counseling, the professor keeps a record of individual class attendance. When he believes the absences are excessive he will report the fact to Student Personnel Services and they in turn will counsel with the student. The total number of student absences in a class will be reported to the Registrar's office along with the final grade at the end of the semester.

The student should be aware that absenting himself from class invariably has a built-in penalty of lower academic achievement. Excessive absences usually result in failure to achieve the course goals.

CORRESPONDENCE AND EXTENSION

A maximum of 12 semester hours of credit by correspondence or extension study from approved institutions may be considered for transfer.

STATE LEGISLATION REQUIREMENT

Sections 10373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the general education curriculum requirements in Area 2, or who have completed an American history course covering and including the constitutional period plus a course in State Government, or Missouri His-

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tory and Government, or pass a special examination on the new Missouri Constitution, meet the requirements of Missouri law.

WITHDRAWAL FROM COURSES

If a student officially withdraws from a course during the first week of classes, no entry will be made on the permanent record. If official withdrawal is made after the first week and before the end of the twelfth week of classes, a mark of W is entered on the record. Withdrawal from a course after the twelfth week results in a grade of F. Exception to the F grade will be considered only on extenuating circumstances beyond the student's control and only by special permission from the Dean of the College.

WITHDRAWAL FROM COLLEGE

Except at the end of a semester or regular school session, any student who withdraws from Missouri Southern State College must obtain a "Withdrawal from School Permit" from the Student Personnel Office. When this form is completely processed, the student will report to the Registrar's Office for final withdrawal. If all records are clear, the student is honorably dropped from the College and is eligible to return, subject to minimum standards of progress regulations.

A student who leaves the College without completing the "Withdrawal from School Permit," except at the end of a semester or a regular school session, will not be eligible to re-enter the following semester.

AUDITORS

With the consent of the chairman of the division and the instructor concerned, a student may be admitted to a course as an auditor. Auditors must be registered and pay fees as a regular or special student. They receive no college credit.

ADVANCED PLACEMENT

To seek advanced standing or college course credit, the high school applicant must take the **Advanced Placement Examination** of the College Entrance Examination Board in the field of study for which he may qualify. Students who have taken an Advanced Placement course in high school and who have passed the National Advanced Placement Examination in that course at a 3-point level or higher are automatically eligible for placement at the next level of the college sequence and may receive college credit. A **Bulletin of Information for Students** is available through the high school or the College Board Advanced Placement Examinations, Box 592, Princeton, New Jersey 08540.

Students who have been out of high school and have had varied study programs, or who have had college study that needs validating, may ask the Director of Guidance and Testing at Mis-

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souri Southern State College for the privilege of taking the **College Level Examination** Tests of Educational Testing Service. The quality of performance on the tests will determine whether advanced standing or credit can be given. Write the Director of Guidance and Testing, Missouri Southern State College, Joplin, Missouri 64801, for details and information on subject matter areas for which tests are available.

TRANSFER CREDIT

The maximum credit that a student may present from a junior college toward advanced standing is 64 semester hours.

Upper division courses carrying a grade of D will not be accepted for credit at Missouri Southern State College.

Transfer students must take in residence at Missouri Southern State College a minimum of fifteen credit hours required in the major field of study.

Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern State College.

DEGREES AND GRADUATION REQUIREMENTS

Degrees

Missouri Southern State College has two distinct divisions, junior and senior (or lower and upper), both directed by the same Board of Regents, Administrators, and Faculty. Baccalaureate degrees are offered by the senior college division and associate degrees are offered by the lower division.

The baccalaureate degrees offered are the Bachelor of Arts, Bachelor of Science and Bachelor of Science in Education.

The associate degrees offered are Associate of Arts and Associate of Science.

The Certificate of Achievement is offered for one year of successful study in the secretarial-typist curriculum.

The Bachelor of Arts degree is available with majors in art, English, history, music, political science, psychology, sociology, Spanish, and speech and drama.

The Bachelor of Science degree is available with majors in biology, business administration, chemistry, mathematics, environmental health, and medical technology.

The Bachelor of Science in Education degree is available in elementary education, and in the following areas for those planning to teach at the secondary level: Art, biology, business, chemistry, English, foreign language (Spanish), mathematics, music, health, physical education and recreation, physical science, physics, speech and drama, social science (with concentrations possible in history, political science, or sociology).

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The Associate of Arts degree is available in pre-agriculture, pre-dental, pre-engineering, pre-journalism, pre-medical, pre-optometry, and pre-pharmacy.

The Associate of Science degree is available in accounting, automotive technology, computing analysis, cosmetology, data processing and computer programming, drafting and design, electronic data processing coordinator, general business, law enforcement, machine technology, nursing, radiologic technology, environmental health, and secretarial science.

Majors

The subject matter area of concentration is called a major. See paragraphs above for listing of the majors offered. The requirements for each major are explained immediately preceding the course descriptions for each department, beginning with page 68

Graduation Honors

In recognition of superior scholarship, the college awards honors to associate degree and baccalaureate degree graduates as follows:

Associate Degree. The student must have completed a minimum one half of the hours required for the degree in residence at Missouri Southern State College. The cumulative grade point average required to receive First Honors is 3.75; Second Honors, 3.65, and Third Honors, 3.50.

Baccalaureate Degree. Cum Laude is awarded those students who have a cumulative grade point average of 3.3.

Magna Cum Laude is awarded those students who have a cumulative grade point average of 3.7.

Summa Cum Laude is awarded those students who have a cumulative grade point average of 3.85.

Eligibility for any one of the three honors also requires the candidate to study all his junior and senior years at Missouri Southern State College and earn a minimum 60 semester hours of credit.

REQUIREMENTS FOR GRADUATION

The degree requirements in this catalog, 1972-73, become effective June 1, 1972.

A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the College, so long as it is not more than five years prior to the date the degree is to be conferred. The candidate must have been in residence during the year of the catalog selected.

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Baccalaureate Degrees

Residence — The student must have earned thirty out of the final thirty-six semester hours in residence at Missouri Southern State College. (This regulation does not apply to three-one affiliation programs.)

Credit Hours — At least one hundred twenty-four semester hours of college credit applicable to a baccalaureate degree are required to qualify for graduation.

Grade Point Average — A 2.0 cumulative grade point average on all credit hours attempted is required. The courses making up the major field of study must also carry a 2.0 or above. See the Department of Education for the special requirements in the Teacher Education Program.

Upper-Division Hours — A minimum of forty semester hours in upper division courses (those with numbers in the 300's and 400's) must be presented to meet the graduation requirements. Reasonable adjustments are made for three-one affiliation programs.

Time of Graduation — A student may complete graduation requirements at the close of any semester. Formal announcement of graduation is made and degrees are conferred at the close of the spring semester. All students completing graduation requirements since the preceding commencement are expected to participate in the commencement activities.

Major Field — A minimum of 12 upper division credit hours must be earned in the major field. The grade point average for courses making up the major must be 2.0 or above. A minimum of 15 semester hours must be taken at Missouri Southern State College.

Placement Services — Each degree candidate must register in the Placement Office.

Degree Candidacy Application — Each student must make application for degree candidacy when pre-registering for his final semester in the school year in which he is to receive his degree. The application form is available in the office of the Registrar.

Educational Methods Courses — These courses, including student teaching, are applicable only to the Bachelor of Science in Education Degree.

Correspondence and Extension Credit — A maximum of twelve semester hours of correspondence and extension credit may be considered for admission to the degree.

State of Missouri Requirement — All candidates for a degree must satisfactorily complete a course in United States History including a study of institutions and national and state governments. This requirement may be satisfied by History 110 or 120.

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and Political Science 120 or 210. Education majors must take History 110 and 120.

GENERAL EDUCATION REQUIREMENTS

Missouri Southern State College has a program of General Education that contributes toward the development of the whole person, as an individual and as a member of society.

To accomplish this goal, the student pursues a carefully planned and correlated program of courses. The courses selected to fulfill the General Education requirements:

- a. improve skills of communication and mathematical proficiency;
- b. give an understanding of leading intellectual ideas of western civilization;
- c. create an appreciation of our cultural and political heritage;
- d. emphasize responsibility as a citizen;
- e. aid in the development of creative and independent thought and expression;
- f. provide knowledge and understanding of the physical universe;
- g. develop awareness of the importance of health and physical fitness; and
- h. afford experiences conducive to the development of strong character and personality.

BACCALAUREATE DEGREE

Area 1. Basic Skills	Credit Hrs. Required
1. English 101-102, English Composition	6 hours
Select one: Speech 100, Speech Techniques	3 hours
Speech 202, Public Speaking	3
Select one: 2. Math 110, Introduction to College Math 1 Math 130, College Algebra	3 hours
Total for Area 1	12 hours

1. Students who qualify for Eng 111 satisfy the composition requirement with this course.
2. Higher level mathematics courses also satisfy this requirement.

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Area. 2. Social Sciences	Credit Hrs. Required
History 110 or 120, History of United States	3 hours
1. Psychology 100, General Psychology	3 hours
Select one:	3 hours
Political Science 120, U. S. Government	3
Political Science 210, State and Local Government	3
Select one:	3 hours
History 200, Western Civilization	3
History 201 or 202, Modern European History	3
History 331, Economic History of U.S.	3
Economics 201, Principles of Economics	3
Geography 211, Regions and Nations	3
Geography 222, Economic Geography	3
Sociology 110, Introduction to Sociology	3
Total for Area 2	12 hours

1. Education and Psychology majors should substitute Psy 110, Psychology of Human Development for this requirement.

Area 3. Humanities and Fine Arts	Credit Hrs. Required
Any 6 hours of literature courses for which the student is qualified.	6 hours
Select one:	3 hours
Art 110, Introduction to Art	3
Music 110, Music Appreciation	3
Drama 110, Theatre Appreciation	3
Philosophy 201, Introduction to Philosophy	3
Total for Area 3	9 hours

Area 3 Note: Students taking the Bachelor of Arts degree must receive credit for two college semesters of the same foreign language in addition to the 9 hours indicated above. See page 105 for details.

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Area 4. Natural Sciences	Credit Hrs. Required
Select one: Biology 100, General Biology Or any five hour course in Biology	5 hours 5
Select one: Physics 100, Fundamentals of Physical Science Or any five hour course in Chemistry or Physics	5 hours 5
Total for Area 4	10 hours

Area 5. Health and Physical Education	Credit Hrs. Required
1. HPER 101-102, Introduction to Physical Activity	2 hours
2. HPER 160, Personal Health Or 2 additional hours of activity courses may be substituted for HPER 160	2 hours
Total for Area 5	4 hours

Total general education credits required—47.

(Add foreign language credit when applicable.)

1. Physically restricted students may take HPER 100.
2. Education majors must take a health course, either HPER 160 or HPER 370.

All freshmen must enroll each semester in English and Physical Activity until the general education requirements in these areas are fulfilled.

A qualified student may substitute a more advanced course in any area above with the permission of the department responsible for the general education course.

ASSOCIATE OF ARTS DEGREE

Credit Hours — A minimum sixty-two semester hours must be completed.

Residence — The last fifteen semester hours must be completed in residence at Missouri Southern State College.

Grade Point Average — Minimum cumulative and major field grade point average must be 2.0.

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Major Field — The student must meet the course requirements of the particular pre-professional program he selects. Or, the degree may consist of the general education courses plus additional hours adding up to 62, as approved by the adviser and the dean of the college.

General Education Requirements — The degree requires completion of the general education requirements which are:

Area 1. Basic Skills	Credit Hrs. Required
1. English 101-102, English Composition	6 hours
Select one:	
Speech 100, Speech Techniques	3 hours
Speech 202, Public Speaking	3
Select one:	
Math 110, Introduction to College Math 1	3 hours
2. Math 130, College Algebra	3
Total for Area 1	12 hours

1. Students who qualify for Eng 111 meet the composition requirements with this course.
2. Higher level mathematics courses also satisfy this requirement.

Area 2. Social Sciences	Credit Hrs.	Required
History 110 and 120, History of United States	6 hours	
Select one:	3 hours	
Political Science 120, U.S. Government	3	
Political Science 210, State and Local	3	
Government	3	
History 200, Western Civilization	3	
History 202, Europe 1815 to Present	3	
Geography 211, Regions and Nations	3	
Geography 222, Economic Geography	3	
Psychology 100, General Psychology	3	
Sociology 110, Introduction to Sociology	3	
Economics 202, Principles of Economics	3	
Total for Area 2	9 hours	

ACADEMIC REGULATIONS

Area 3. Humanities and Fine Arts	Credit Hrs. Required
Any 3 hours of literature courses for which the student is qualified.	3 hours
Select one:	
Music 110, Music Appreciation	3
Art 110, Introduction to Art	3
Drama 110, Theatre Appreciation	3
Philosophy 201, Introduction to Philosophy	3
Total for Area 3	6 hours

Area 4. Natural Sciences	Credit Hrs. Required
Any biological or physical science	5 hours
Total for Area 4	5 hours

Area 5. Health and Physical Education	Credit Hrs. Required
Select one:	
HPER 101-102, Introduction to Physical Activity	2
HPER 160, Personal Health	2
Total for Area 5	2 hours

Total general education credits required—34.

ACADEMIC REGULATIONS

ASSOCIATE OF SCIENCE DEGREE

Credit Hours — A minimum of sixty-two semester hours must be completed.

Residence — The last fifteen semester hours must be completed in residence at Missouri Southern State College.

Grade Point Average — The minimum cumulative and major field grade point average must be 2.0.

Major Field — The student must meet the course requirements in the particular program of study he selects as approved by his adviser.

General Education Requirements — The degree requires completion of the general education courses as well as those outlined in his major field of study. The general education required courses are:

Area 1. Basic Skills	Credit Hrs. Required
1. English 101, English Composition	3 hours
Select one:	3 hours
2. Math 20 and 30, Programmed Course in Beginning and Intermediate Algebra	3
Math 110, Introduction to College Mathematics	3
3. Speech 100, Speech Techniques	3
Total for Area 1	9 hours
1. Students who qualify may take Eng 111 to meet this requirement.	
2. Higher level mathematics courses also satisfy this requirement.	

Area 2. Social Sciences	Credit Hrs. Required
Select one:	
History 110 or 120, History of the U.S.	3
Political Science 120, U.S. Government	3
Select one:	3 hours
Sociology 110, Introduction to Sociology	3
Sociology 152, Introduction to Anthropology	3
Psychology 100, General Psychology	3
Total for Area 2	6 hours

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Area 3. Humanities and Fine Arts	Credit Hrs. Required
Select one:	
Drama 110, Theatre Appreciation	3
English 120, World Masterpieces	3
English 210, English Literature	3
Philosophy 201, Introduction to Philosophy	3
Music 110, Music Appreciation	3
Art 110, Introduction to Art	3
Total for Area 3	3 hours

Area 4. Natural Sciences	Credit Hrs. Required
Select one:	
Biology 100, General Biology	5
Physics 100, Fundamentals of Physical Science	5
Chemistry 100, Introductory Chemistry	5
Total for Area 4	5 hours

Area 5. Health and Physical Education	Credit Hrs. Required
Select one:	
1. HPER 101-102, Introduction to Physical Activity	2
HPER 160, Personal Health	2
Total for Area 5	2 hours

1. Physically restricted students may take HPER 100.
Total general education credits required—25.

THE CURRICULUM

DIVISIONAL ORGANIZATION AND OBJECTIVES

The college is organized into four divisions three of which has a chairman as its executive. The fourth is directed by an associate dean. The divisions are subdivided into departments. The divisions and departments are under the administrative supervision of the Dean of the College.

The divisional objectives and programs are as follows.

I. Division of Business Administration (Departments of accounting, economics, general business, marketing and management, and office administration) :

(1) Preparing individuals for positions of responsibility and leadership in industry and government; (2) Preparing individuals to teach business subjects on the secondary level; and (3) Preparing individuals to enter the business community, obtain initial employment and perform effectively on the operative level in an organization.

It is the primary purpose of the Division of Business Administration to continuously develop and improve the caliber of instruction, programs, and courses which will achieve these objectives and, thereby, fulfill the educational needs and goals of the individuals previously mentioned.

The Division of Business Administration offers two baccalaureate degrees—the Bachelor of Science in Business Administration (three approaches: Accounting, General Business, Marketing and Management) and the Bachelor of Science in Education with a major in business (two plans). In addition, several short-term business programs are offered; they are described under Semi-Professional and Technical Curricula.

II. Division of Education and Psychology (departments of elementary education, secondary education, health, physical education and recreation, and psychology) :

The programs of this division are designed to reflect the following general aims:

(1) To prepare persons who demonstrate by their behavior the professional, social, emotional, and intellectual maturity necessary to perform effectively as elementary and secondary school teachers; (2) To prepare persons who display a meaningful philosophy of living and a dedication to service; (3) To prepare persons who indicate in their daily lives a concern for and knowledge of good physical and mental health; (4) To teach creative and beneficial leisure-time activities that will serve the student throughout life; (5) To prepare persons with a degree

THE CURRICULUM

of understanding in the area of psychology which is necessary to perform well as a graduate student or to be of service to society in a service vocation.

The Division provides specific course work leading to the degrees of Bachelor of Science in Education and the Bachelor of Arts with a major in psychology. More specifically the Department of Education is responsible for the teaching and coordinating of the professional education sequence in the Bachelor of Science in Education degree. It also administers the major programs in elementary education and special education. The department of Health, Physical Education and Recreation serves the basic requirements for all college students, provides a major in professional physical education, and provides minors in driver education instruction and athletic coaching. The Department also supervises the women's and men's intramural sports programs.

III. Division of Arts and Sciences:

Objectives of departments of art, language and literature, music, and speech and drama

These departments comprise those areas of learning in which the student is made aware of some of mankind's greatest thought and noblest art. Through the study of art, journalism, language, literature, music, philosophy, speech, and drama, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

These departments are concerned with creative self-expression, although distinct in that each is a specific discipline or area of study.

A. Viewed in relation to the total college curriculum, the functions of the departments are twofold:

1. General Education — Certain courses offered in every area of Humanities and Fine Arts are especially designed to make available to each student skills and understanding which greatly add to his personal development, regardless of his specialization. (a) Through courses in English and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. (b) By studying foreign languages, he will learn to communicate with people of other nations and to appreciate the intellectual contributions of cultures other than his own. (c) Through participation in drama, he will develop poise and power of oral expression. (d) In a guided study of the masterpieces of music and art, he will learn to enjoy and appreciate world treasures. (e) In philosophy, he will become familiar with the problems of knowledge, the natural world, and society, and with the quest for the good life.

DIVISIONAL OBJECTIVES

2. Major or Area of Concentration — To achieve a high level of competency in his special interests, a student elects an area of concentration. (a) Programs in art, English, foreign languages, speech, drama, and music form major areas for candidates for the Bachelor of Science in Education degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education degree with a major in elementary education. (c) Students not planning to teach but desiring competency in an area may elect to receive a Bachelor of Arts degree for personal enrichment or as preparation for graduate study.

B. In addition to curricular functions, the departments exert a strong influence upon the cultural life of the college and community.

1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students, thus serving as a valuable outlet for aesthetic self-expression.

2. The regular publication of the college newspaper, *The Chart*, not only provides practical experience for students interested in journalism, but also serves the college community and alumni with reports of college activities.

3. A creative arts publication written and edited by MSSC students, under the sponsorship of the Language and Literature and Fine Arts Departments, serves the dual purpose of providing an outlet for artistic and literary expression and practical experience in the editorial functions associated with publishing. Through this medium, young writers and artists may not only gain experience in the development of their talents, but also enrich the cultural resources of the college community. This is an opportunity that they and their editors have for speaking to and for the other students, and, at the same time, for interesting, entertaining, and influencing all at MSSC.

4. Displays of art works by students and faculty in the Art Gallery and in the exhibits sponsored by Spiva Art Center, housed in the Gallery, stimulate the artistic community.

5. The services of members of the faculty of all departments to community organizations—professional, cultural, and civic—aid in acquainting the public with the programs of the college.

Objectives of departments of biology, chemistry, geology, mathematics, and physics

To support the purposes and objectives of the college by correlating the various departments of science and mathematics in

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order to aid the student to: (a) become more knowledgeable about the biological and physical aspects of the earth and universe; (b) understand and use the scientific method; (c) gain a comprehensive understanding of subjects for teaching (if teaching is the goal); have a broad base of learning and understanding, regardless of the major field of study selected, through general education courses. The division also meets needs of students preparing for engineering, dentistry, medical technology, medicine, and nursing.

Objectives of departments of geography, history, political science, and sociology

The purposes are to provide the student with the skill, attitudes, and understanding necessary to give life direction and meaning; to encourage the student to think and to evaluate the broad issues of life; and to stimulate his acquiring new interests that he may pursue for the sheer pleasure of learning.

The division has a special concern in the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

The objectives of the division are:

1. To prepare students for certification as social science teachers in the elementary and secondary schools.
2. To provide the undergraduate education needed for students desiring to continue graduate work in history, political sciences or sociology.
3. To provide a program of extracurricular activities that aid in introducing the student to his future role of service to community and nation.

IV. Division of Technology (departments of automotive technology, aviation, computer science, cosmetology, drafting and design, law enforcement, health administration, machine technology, nursing, and radiologic technology):

(1) To provide opportunity for post-high school education for students seeking skills preparing them for employment. (2) To give both specialized instruction and general education in sufficient balance to prepare for living as well as working in society. Students enrolling in the specialized courses of this division should know that many of them may not be applicable toward a baccalaureate degree if he should later decide to seek it.

DIVISIONAL OBJECTIVES

DEPARTMENTS AND THEIR SYMBOLS

The courses of instruction are divided by subject matter or departments. Each course carries a number. When reference is made to a particular course, or when the class schedule for a given semester is constructed, entries similar to the following are made: Eng 101 English Composition. Many times only the departmental abbreviation and number are used such as "Eng 101." Below are the names of the departments and their abbreviations.

Accounting	Acct	Health Administration	HA
Art	Art	History	Hist
Automotive Technology	Auto	Journalism	Jour
Aviation	Av	Law Enforcement	LE
Biology	Bio	Machine Technology	MT
Business (General)	GB	Marketing & Management	MM
Chemistry	Chem	Mathematics	Math
Computer Science	Comp	Music	Mus
Cosmetology	Cos	Nursing	Nur
Drafting & Design	DD	Office Administration	OA
Economics	Econ	Philosophy	Phil
Education	Educ	Physics	Phys
English	Eng	Political Science	PSc
Foreign Language		Psychology	Psy
French	Fren	Radiologic Technology	RT
German	Ger	Sociology	Soc
Spanish	Span	Speech & Drama	
Geography	Geog	Drama	Dr
Geology	Geol	Speech	Spch
Health, Physical Education & Recreation	HPER		

COURSES OF INSTRUCTION

ACCOUNTING

Division of Business Administration

Finke, Goode, Gray, Stengel, Stone, Worthington

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Accounting approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 158.

101, 102 — Elementary Accounting (per sem.) 3 hrs. cr.

(101) Fundamental principles of accounting as applied to modern business practice. Analysis of balance sheets and income statements; (102) Continues Accounting 101 with emphasis on corporation accounts. Prerequisite or corequisite GB101.

211 — Cost Accounting 3 hrs. cr.

Study of accounting control with management emphasis as applied to industrial enterprise. Special emphasis on product costs and cost systems. Prerequisite: Acct 102.

212 — Intermediate Accounting I 3 hrs. cr.

A continuation of corporation accounting including a detailed study of the fundamental process with emphasis on current assets, current liabilities, and noncurrent investments. Prerequisite: Acct 102.

301 — Intermediate Accounting II 3 hrs. cr.

A continuation of corporation accounting, including noncurrent balance sheet accounts (tangible and intangible assets, long-term liabilities, and stockholders' equity) and special statements and analyses. Prerequisite: Acct 212.

302 — Advanced Accounting 3 hrs. cr.

Application of accounting principles to partnerships, installment and consignment sales, receiver's accounts, estates and trusts, and consolidating statements. Prerequisite: Acct 301.

401 — Tax Accounting 3 hrs. cr.

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing federal income tax returns. Prerequisite: Acct 102 or permission. (See General Business 401.)

ART

402 — Advanced Income Tax 3 hrs. cr.

Income tax regulations that apply to partnerships, corporations, estates, trusts, foreign, gift, and social security taxes. Practice is given in preparing the federal tax returns. Prerequisite: Acct 401.

411 — Auditing 3 hrs. cr.

The procedures involved in preparing an audit of the various accounts of a business enterprise. Prerequisite: Acct 301.

481 — Seminar in Accounting 1-3 hrs. cr.

A seminar for upper division accounting or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

482 — Independent Study in Accounting 1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of accounting for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

491 — Internship in Public Accounting 3 hrs. cr.

Selected senior accounting students serve an internship of approximately six weeks as junior accountants on the staff of practicing certified public accountants. The program is supervised by the faculty. An oral and written report is required. Prerequisites: Acct 301, 401, 411 and/or consent of the internship committee.

ART

Division of Arts and Sciences **Department of Art**

Cole, Dishman, Fowler, Hess

A major for the Bachelor of Arts degree includes 32 required credit hours plus 18 hours of art electives approved by student's advisor. Required art courses are: Art 100, Art 121, Art 131, Art 132, Art 211, Art 230, Art 232, Art 301-302, Art 312, and Art 490.

A major for the Bachelor of Science in Education degree with one teaching field consists of 32 credit hours plus 15 hours of art electives approved by the student's advisor. Required art courses are: Art 100, Art 121, Art 131, Art 211, Art 220, Art 132 or 230, Art 232, Art 301-302, Art 312 and Art 490. A student wishing to certify to teach art as one of two teaching fields must complete 36 hours. See page ... for teacher education requirements.

100 — Art Composition 3 hrs. cr.

Introductory course using fundamental techniques and media, including art practice and theory.

COURSES OF INSTRUCTION

110 — Introduction to Art	3 hrs. cr.
A general survey course designed to increase appreciation of visual art.	
121 — Ceramics	3 hrs. cr.
Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Prerequisite: Art 100 or 110.	
131 — Drawing Techniques	3 hrs. cr.
Free-hand drawing problems using various drawing tools and techniques used by master artists. Prerequisite: Art 100.	
132 — Introduction to Design	3 hrs. cr.
Foundation course using problems involving art principles and elements.	
200 — Arts and Crafts	3 hrs. cr.
General crafts course involving leather tooling, block printing, pottery, weaving and some graphics. May be taken by non-art majors.	
205 — Beginning Jewelry and Silversmithing	3 hrs. cr.
A general introduction to jewelry casting, soldering, and finishing metals. Prerequisites: Art 100 and Art 132.	
211 — Sculpture Techniques	3 hrs. cr.
Study of various sculptural problems and techniques in stone, clay, wood, and mixed media. Prerequisite: Art 100, 121.	
220 — Art Education	3 hrs. cr.
Course designed to develop understanding of the problems in teaching art with emphasis on methods of teaching various art problems. Required of all Elementary Education Majors.	
230 — Basic Form	3 hrs. cr.
Study of relationships of parts to form. Problems include two and three dimensional. Prerequisite: Art 100 or 110.	
232 — Painting	3 hrs. cr.
Procedures, techniques, and fundamentals of painting, media—oil, watercolor, and mixed. Prerequisite: Art 100 and 131.	
300 — Drawing	3 hrs. cr.
Self exploration of various drawing elements including artistic anatomy, composition, structure, and aesthetics. Prerequisite: Art 100, 131, or approval of the instructor.	
301-302 — Art History	(per sem.) 3 hrs. cr.
(301) Survey of the development of man's artistic endeavors from Stone Age to the Early Renaissance; (302) Continuation of 301 from the Early Renaissance in Italy to the present art styles.	

AUTO TECHNOLOGY

310 — Watercolor	3 hrs. cr.
Technical and aesthetic understanding of watercolor with various subject matters encouraged. Prerequisite: Art 131.	
312 — Graphics	3 hrs. cr.
Initial laboratory exercises in various graphic processes—etching, engraving, block print, and lithography. Prerequisite: Art 300.	
321-322 — Sculpture	3 hrs. cr.
Various media (plastic, metal, clay, mixed) are chosen by the student for investigation; (322) Continuation of 321. Prerequisite: Art 211 and 312.	
401 — Painting	3 hrs. cr.
The student selects an individual problem for investigation. Techniques, history, and painting methods of acrylic or oil paintings are surveyed for understanding. Prerequisite: Art 232.	
407 — Advanced Ceramics	3 hrs. cr.
Advanced methods, techniques, and procedures of pottery making and design in clay. Prerequisite: Art 121.	
412 — Commercial Art	3 hrs. cr.
Lettering, layout, and design techniques. Survey of various reproductive processes. Prerequisite: Art 131, 230, and 232.	
421 — Head Study	3 hrs. cr.
Fundamental methods in portraiture. Various drawings and painting media for structure of the head. Artistic head anatomy used for each head study. Prerequisite: Art 131 and 232 or 300.	
442 — Seminar in Art	3 hrs. cr.
Student art problems investigated with group participation. Class meets twice weekly with Department Head to discuss student findings. Requirements: research papers and oral presentations of investigated problems. Prerequisite: 20 credit hours in art.	
490 — Senior Studio	2 hrs. cr.
Special study in any art media or technique chosen by the student. Requirements: (1) Art survey paper, (2) Senior art exhibit, (3) Oral presentation. Prerequisite: Senior standing.	

AUTOMOTIVE TECHNOLOGY

Division of Technology

Adams, Mason

The major emphasis in Automotive Technology is specialization in automotive service and business management. The train-

COURSES OF INSTRUCTION

ing also provides the background for entry into a general automotive repair or specialized field where a technical knowledge of machines, tools and testing equipment is required.

The curriculum is college oriented. Students are regular members of the campus body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science degree in Automotive Technology requires the completion of the General Education courses (see page plus the following: Auto 100, Auto 110, Auto 120, Auto 130, Auto 190, Auto 200, Auto 220, Auto 250, Auto 260, and Draft 110.

100 — Automotive Engine **5 hrs. cr.**

A beginning course in theory and practical mechanics of the Internal Combustion Engine. Emphasis is placed on the physics and chemistry of combustion as related to engineering principles. Students work in the laboratory shops with engines to learn mechanical relationships and usage of tools and gauging instruments. Three one-hour lectures; 12 hours laboratory per week.

110 — Technical Mathematics **3 hrs. cr.**

Review of basic mathematics, algebra, and the functional concepts of trigonometry. Includes use of tables and graphic methods of solving problems with emphasis on application to problems in applied fields. Daily. Prerequisite: Math 20-30.

120 — Automotive Electrical and Emission Control **5 hrs. cr.**

A beginning course in electricity, basic automotive ignition systems, fuels and lubricants, production and testing. Emphasis is on electrical fundamentals as related to spark ignition and carburetion principles. Laboratory periods provide opportunity to learn mechanical relationships of parts in carburetors, starters, generators, regulators and relays, and distributors. Three one-hour lectures; 12 hours laboratory per week.

130 — Automotive Business Management **3 hrs. cr.**

A basic accounting cycle with emphasis on recording transactions affecting cash, sales, purchases, and the preparation of financial statements. Three one-hour lectures.

150 — Automotive Theory and Mechanics **3 hrs. cr.**

A course designed to acquaint the student with theoretical and practical knowledge of the basic functions and care and maintenance of the various automotive systems and common accessories. Laboratory periods provide students the opportunity to learn common diagnostic techniques and to make non-technical corrections of the more commonly occurring automotive malfunctions. Basic safety inspections will be emphasized. Suggested as an essential course for all students obtaining certifi-

AUTO TECHNOLOGY

cation as instructors of driver education and as an elective course for any student who wishes to increase his or her knowledge about the automobile. Two one-hour lectures; one two-hour laboratory per week.

190 — Technical Science **4 hrs. cr.**

Graphical and mathematical analysis of forces, laws of motion machines, mechanical power, fluid mechanics, and fastening devices as related to basic machine design. Course work places emphasis on applied problems. Three one-hour lectures; one two-hour laboratory. Prerequisite: Auto 110 or Math 140 and Math 100 with minimum grades of C.

200 — Automotive Chassis, Brakes and Transmissions **5 hrs. cr.**

Principles of hydraulics, pneumatics, and dynamic forces as related to the modern automobile. Shop work emphasizes balance, steering, control, suspension design, and power train component operation. Students learn mechanical relationships in transmissions, clutches, and differentials; also, front and rear suspensions and brake systems. Three one-hour lectures; 12 hours laboratory per week.

220 — Automotive Refrigeration and Air Conditioning **3 hrs. cr.**

The course familiarizes the student with automotive air-conditioning installation and thermodynamic principles. Students service units on and off the vehicle and study problems related to heat transfer and cooling. Two one-hour lectures; 4 hours laboratory per week.

250 — Automotive Body and Paint **5 hrs. cr.**

Theory and practice in metallurgy as related to metal fabricating, moulding, shaping, and welding. Students work in shop laboratory repairing basic automotive body parts. Emphasis is on repair theory as well as making repairs and refinishing damaged body parts. Three one-hour lectures; 12 hours laboratory per week.

260 — Automotive Service Management **5 hrs. cr.**

Simulated automotive dealership garage with actual working conditions on customers' cars. Emphasis is placed on public relations, auto shop layout, and management of personnel. 15 hours. Prerequisite: Auto 100, 120, 200, and 220 with minimum grades of C.

COURSES OF INSTRUCTION

AVIATION

Division of Technology

AB 200 — Basic Pilot Training 5 hrs. cr.

An integrated course designed to meet ground school and flight training requirements for eligibility to take Federal Aviation Administration examination for a Private Pilot Certificate. In addition to scheduled ground school classes, course requires approximately 40 hours of dual and solo flight and check flight. Credit awarded when FAA certificate is obtained. Special fees and third class medical certificate required. Special fees for this course are \$677 which includes plane rental and examiner's test fee. Course grade is recorded as Pass or Fail.

BIOLOGY

Division of Arts and Sciences

Department of Biology

Bingman, Elick, Gier, Griffin, Orr, Stebbins

The Bachelor of Science degree with a major in biology requires 37 hours in biology. Required courses include Bio 110, Bio 120, Bio 202, Bio 211, Bio 303, and Bio 480.

Upper division students may follow interests but must take at least one course from each of the following areas. A (structure), B (function), C (identification).

Group A — Bio 331, Bio 413, Bio 424, Bio 462

Group B — Bio 321, Bio 402, Bio 431

Group C — Bio 322, Bio 341, Bio 442

Additional requirements include 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as a single teaching field (Plan B) requires 30 hours in biology plus 18 hours in supporting subjects of chemistry and mathematics. Required courses include Bio 110, Bio 120, Bio 211 and 12 upper division hours in biology. In addition, 13 hours of chemistry through organic and Math 140.

The Bachelor of Science in Education degree with biology as one of two teaching fields (Plan A) must complete 22 semester hours in biology, 12 of which must be upper division, plus 13 hours in supporting subjects of science and mathematics. Required courses are Bio 110, Bio 120, and Chem 100, three hours in mathematics, and either Phys 151 or Geol 110.

See page 91 for teacher education requirements.

BIOLOGY

100 — General Biology 5 hrs. cr.

A one semester general treatment of the unifying principles of living things including metabolism, genetics, evolution and ecology. Four lectures and one 2 hour lab per week. (Does not count toward any biology major.)

110 — General Botany 5 hrs. cr.

Fundamental principles of metabolism, growth and reproduction as expressed in the plant kingdom. A survey of the major groups of plants is included as an integral part of the study. Three lectures and two 2 hour labs per week.

120 — General Zoology 5 hrs. cr.

The morphology, physiology and classification of animals with emphasis on the anatomy and physiology of man. Three lectures and two 2 hour labs per week.

201 — Economic Botany 3 hrs. cr.

A comprehensive study of the economic uses of plants. The present and possible future value of lower plants is covered. Emphasis is placed upon the economic aspects of higher plants from an agricultural, horticultural and crop selection viewpoint as well as from a pharmacological textile usage, etc. view. Three lectures a week. Prerequisite: Bio 100 or 110.

202 — Genetics 3 hrs. cr.

A comprehensive introduction to the principles of heredity and variations as exemplified by both the higher plants and animals. Emphasis will be placed on the cytological and molecular approach to gene action, linkage, crossing-over and various other genetic mechanisms such as sex-linkage and mutations. Three lectures a week. Prerequisite: Bio 100, 110, or 120.

211 — Microbiology 5 hrs. cr.

Principles of general microbiology with special emphasis on the anatomy, nutrition, physiology and chemistry of bacteria, fungi, and other microscopic organisms. Three lectures and two 2 hour labs per week. Prerequisites: Bio 100 or 110 and one year of inorganic chemistry, or permission of the instructor.

221 — Human Anatomy and Physiology 5 hrs. cr.

The structures and functions of the human body with emphasis on arrangement of organs and coordination of body systems. Three lectures and two 2 hour labs per week. Prerequisite: Bio 120.

231 — Fundamentals of Medical Microbiology 5 hrs. cr.

For students interested in paramedical professions. Topics of study include the general principles of microbiology, immun-

COURSES OF INSTRUCTION

ology, host-parasite relationships of pathological organisms. Three lectures and two 2 hour labs per week. Prerequisite: 1 course each of a college chemistry and a biological science. Credit toward the biology major may include either Bio 211 or Bio 231 but not both.

302 — History of Biology 2 hrs. cr.

A historical survey into the origin and development of the fundamental concepts of biology as well as contemporary developments in the field of biological research. Two lectures a week. Prerequisite: Junior standing or consent of the instructor.

303 — Principles of Taxonomy 1 hr. cr.

A course designed to aid the biology student in the principles of zoological and botanical taxonomy, understanding the species concept and cognizance of taxonomic literature. Prerequisites: Bio 110 and 120 or permission of the instructor. One lecture per week. Fall semester.

310 — Field Biology 2 hrs. cr.

The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consists of one lecture and one two-hour laboratory each week. At least one Saturday field trip will be required. Prerequisite: Bio 100 or permission of instructor. (Does not count toward any biology major.)

312 — Environmental Biology 3 hrs. cr.

A study of environmental factors and their interactions with living things. Emphasis is placed on human ecology and wise environmental utilization. Three lectures per week. Prerequisite: Physics 100, Biology 100, Math 110; or, permission of the instructor.

314 — Environmental Biology Laboratory 2 hrs. cr.

Practical experiences in measuring environmental factors and conducting ecological investigations. Four hours of laboratory per week. Co-requisite or Prerequisite: Biology 312 or permission of the instructor.

321 — Plant Physiology 5 hrs. cr.

The life processes of plants including metabolism, translocation, growth, development, reproduction and response to stimuli. Emphasizes the chemistry of the plant's physiological activities. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 110, and one year of inorganic chemistry. (Organic chemistry is recommended).

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322 — Taxonomy of Flowering Plants 4 hrs. cr.

The relationships among selected plant groups, classification and descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Two lectures and two, 2 hour lab/week. Prerequisites: Bio 110 and 303.

331 — Comparative Chordate Anatomy 5 hrs. cr.

Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure and development with special emphasis on the vertebrate organs and organ systems. Two lectures and two three-hour labs/week. Prerequisite: Bio 120.

332 — Introduction to Entomology 3 hrs. cr.

A study of the insects with respect to collecting methods, taxonomy, life history, morphology and evolution. Prerequisites: Bio 120 and 303. Two lectures and one three-hour lab/week.

341 — Vertebrate Zoology 5 hrs. cr.

Classification, morphology, physiology, development and evolution of vertebrate animals. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 120.

342 — Microtechnique 2 hrs. cr.

A study of the principles of preserving, fixing, staining, and mounting of biological materials. Prerequisites: Bio 110 and 120. Two 2-hour labs/week.

402 — General Ecology 4 hrs. cr.

A study of plant and animal communities in relation to their environment, emphasizing the flora and fauna of Southwest Missouri. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals are also considered. Two lectures and one, 3 hour lab/week. Prerequisite: Bio 110, 120, and 322, or consent of the instructor.

413 — Plant Anatomy 3 hrs. cr.

A comparative study of the tissues and cellular structure in the higher plants as illustrated in roots, stems, and leaves with special emphasis upon the evolution and development of the structures. Two lectures and one 3 hour lab/week. Prerequisite: Biology 100 or 110 and 201.

424 — Plant Morphology 3 hrs. cr.

A comparative study of the structures, life histories, and evolutionary tendencies concerning the vegetative and reproductive

COURSES OF INSTRUCTION

organs of the lower plants. Two lectures and one 3 hour lab/week. Prerequisite: Biology 100 or 110 and 201.

431 — Animal Physiology 5 hrs. cr.

A comprehensive coverage of the chemical and physical phenomena occurring within living animals, with major emphasis placed on vertebrates. Three lectures and two, 2 hour labs/week. Prerequisite: Organic Chemistry and 10 hours of biology. Bio 331, recommended.

432 — Histology 3 hrs. cr.

A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissue. Prerequisite: Ten hours of zoology or consent of the instructor. Two lectures and one 3-hour lab/week.

442 — Invertebrate Zoology 5 hrs. cr.

Classification, morphology, physiology, development and evolution of the classes of invertebrate animals. Three lectures and two, 2 hour labs/week. Prerequisite: Bio 120.

462 — Embryology 5 hrs. cr.

Includes detailed comparisons of developmental process of members of the classes of vertebrates. Three lectures and two, 2-hour labs/week. Prerequisite: Bio 120 and/or Bio 331.

470 — Problems in Biology 1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor. Prerequisite: A minimum GPA of 3.0 in 20 hours of biology.

480 — Seminar 1 hr. cr.

A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members, as well as students, will present reviews in their various areas of interest. One meeting/week. Prerequisites: Primarily for biology majors of junior standing or other interested students with at least 15 hours of biological science.

482 — Seminar in Biology 3 hrs. cr.

A seminar for upper division majors only. The class will meet regularly a minimum of 3 hours each week. The course is designed to give specialized instruction in some discipline of biology not normally covered in other courses. Prerequisite: junior standing, 20 hours in biology and a minimum GPA of 2.5 in biology. Permission of the instructor required.

GENERAL BUSINESS

Division of Business Administration

Berry, Compton, Cowan, Finke, Goode, Leitle

The student may consider three approaches to the Bachelor of Science in Business Administration degree. Required courses common to all three approaches are: Acct 101, 102, Econ 201, 202, Econ 300, Econ 350, GB 101, GB 220, GB 301, 302, GB 321, MM 300, MM 350 and MM 352. The Accounting approach requires an additional 18 hours out of the following courses: Acct 211, Acct 212, Acct 301, Acct 302, Acct 401, Acct 402, and Acct 411. The General Business approach requires the following 12 hours of additional courses: 3 hours credit selected from each area—Economics, Marketing and Management, and General Business, and 3 additional hours from either Business or Economics. The Marketing and Management approach requires an additional 18 hours of Business and Economics, 12 hours of which are selected from the following: MM 312, MM 401, MM 431, MM 412, MM 452.

A major for the Bachelor of Science in Education degree with Business Education as one of two teaching fields (Plan A) consists of 30 semester hours. The required courses are: OA 101, 102, OA 111, 120, Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, and 3 hours of upper division electives in Business. Other course work may be substituted for shorthand if the student does not plan to certify in it. Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 30 hours requirement. See page 91 for teacher education requirements.

A major in the Bachelor of Science in Education degree with Business Education as a single teaching field (Plan B) consists of 42 semester hours. The required courses are: Acct 101, 102, and either Acct 211 or 212 or 401, Econ 201, 202, GB 121, GB 301, 302, MM 350 or MM 300, OA 101, 102, OA 111, 120, and 3 upper division elective hours in Business. Course substitution and advanced placement is the same as under Plan A in the paragraph above. See page 91 for teacher education requirements.

The requirements leading to Certificates of Achievement and Associate of Science degrees are found on page 158.

101 — Introduction to Business **3 hrs. cr.**

An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

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110 — Business Mathematics **3 hrs. cr.**

A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting and/or office machines.

121 — Office Machines **3 hrs. cr.**

A laboratory course in the operation of the office machines found in the modern business office. Training is given in the operation of the ten-key and full-key adding machines the electronic calculator, the rotary calculator, the printing calculator, the key-driven calculator, the bookkeeping machine, the transcriber, and the spirit and stencil duplicators. Emphasis is placed upon the student developing accuracy and speed in working typical business problems. Meets five days a week. Prerequisite: 1 semester of high school or college typewriting.

122 — Office Machines **3 hrs. cr.**

A advance laboratory course, continuing the work as set up in office machines 121. Special emphasis is placed on machine bookkeeping and the electronic, rotary and printing calculators. The student is also expected to attain additional skill in the operation of adding machines. A special unit of the course includes operation of programmatic electronic equipment. Meets three days a week. Prerequisite: GB 121.

220 — Business Communications **3 hrs. cr.**

The study of principles for writing effective business letters, memos, formal and informal reports and all phases of effective business communications. Prerequisites: Eng 101 and 102 or permission.

301, 302 — Business Law **3 hrs. cr.**

(301) A study of the principles of law and its enforcement as applied to American Business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, and bailments, and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law; (302) Relates to partnerships, corporations, real property and leases, insurance security devices, bankruptcy, trusts, and estates, and government regulations. Cases and problems are used extensively. Prerequisites: Junior standing or consent of the instructor. 301 should precede 302.

CHEMISTRY

321 — Statistics

3 hrs. cr.

Introduction to the basic concepts of statistical inference and to the methods of statistical analysis. Prerequisite: Math 130 or equivalent.

337 — Managerial Data Processing

3 hrs. cr.

Study of the application of automatic information processing to business, the media for recording, processing, and controlling of business information by the automatic process, and the formats and flow of data through electronic computers with simulated problems applicable to areas of Accounting, Management, and Marketing. Prerequisite: Junior standing in Business Administration.

401 — Tax Accounting (See Accounting 401)

3 hrs. cr.

481 — Seminar in General Business

1-3 hrs. cr.

A seminar for upper division general business or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

482 — Independent Study in General Business

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of general business for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

CHEMISTRY

Division of Arts and Sciences

Department of Physical Science

Albright, Baiamonte, Kash, Whittle

A major for the Bachelor of Science degree consists of 34 semester hours in chemistry plus 20 additional hours in mathematics and physics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, 4 elective upper division hours in chemistry, Math 150, Math 250, Phys 250, and Phys 260.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 50 semester hours. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, Chem 401, Math 150, Math 250, Phys 250, and 5 elective hours in 200 level and above courses in mathematics, physics and/or chemistry. See page 91 for teacher education requirements.

A major for the Bachelor of Science in Education degree with chemistry as one of two teaching fields (Plan A) consists of 26

COURSES OF INSTRUCTION

semester hours plus 5 hours of mathematics. The required courses are: Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Chem 302, and Math 140. See page 91 for teacher education requirements.

Physical Science Major

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 20 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys 250, Phys 260, Phys 301, Phys 381, Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Geol 110, plus 3 hours of upper division electives in physics. See page 91 for teacher education requirements.

100 — Introductory Chemistry 5 hrs. cr.

The basic principles and theories of general chemistry. Primarily designed as a terminal course in chemistry. Three lectures, one 3-period laboratory, and one recitation session per week.

101 — General Chemistry I 5 hrs. cr.

Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of changes. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite or corequisite: Math 140 or higher level math course.

102 — General Chemistry II 3 hrs. cr.

A continuation of Chem 101. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Three lectures and one recitation session per week. Prerequisites: Chem 101 with a minimum grade of C or permission of instructor and Math 140 or higher level math course.

162 — Qualitative Analysis 3 hrs. cr.

Identification of cation and anions. Application of principles presented in Chem 102. One lecture and two 3-period laboratories per week. Prerequisite or Corequisite: Chem 102.

201 — Qualitative Analysis 5 hrs. cr.

Includes volumetric, gravimetric, and some potentiometric and spectrophotometric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 102.

300 — Organic and Biological Chemistry 5 hrs. cr.

Deals with the principles of organic chemistry—nomenclature, properties, stereochemistry, and reactions. Designed as an intro-

CHEMISTRY

ductory course in organic chemistry slanted toward a basic understanding of the molecular basis of life. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite: Chem 102.

Note: Not open to students having completed Chem 302.

301 — Organic Chemistry I **5 hrs. cr.**

Deals with both aliphatic and aromatic compounds, their nomenclature, properties, reactions and stereochemistry. Three lectures, one three-period laboratory, and one recitation section per week. Prerequisite: Chem 102.

302 — Organic Chemistry II **5 hrs. cr.**

A continuation of Chem 301. A mechanistic treatment of substitution, elimination, addition, and free radical reactions. Three lectures, one three-period laboratory, and one recitation session per week. Prerequisite: Chem 301.

401 — Physical Chemistry I **4 hrs. cr.**

Gases, solids, liquids, homogeneous and heterogeneous solutions and thermodynamics. Theoretical derivations of equations and mathematical treatments of physical and chemical phenomena. Three lectures and one 3-period laboratory per week. Prerequisites: Math 260 and Phys 260.

402 — Physical Chemistry II **4 hrs. cr.**

A continuation of Chem 401. The study of chemical kinetics, electromotive force, photochemistry, colloid chemistry, and atomic and molecular structure. Three lectures and one 3-period laboratory per week. Prerequisite: Chem 401.

421 — Instrumental Analysis **5 hrs. cr.**

Special analytical technique using spectrophotometry, gas-chromatography, colorimetry, and electrometric methods to include potentiometric, conductometric, polargraphic, and electrogravimetric analysis. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 201.

422 — Advanced Inorganic Chemistry **4 hrs. cr.**

Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Three lectures and one 3-period laboratory per week. Prerequisites: Chem 102 and Math 250.

472 — Organic Qualitative Analysis **4 hrs. cr.**

Systematic identification of organic compounds and mixtures. Two lectures and two 3-period laboratories per week. Prerequisite: Chem 302.

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490 — Independent Study

1-3 hrs. cr.

Independent investigational techniques; includes a paper upon a selected topic with both a critical survey of the chemical literature and results from advanced laboratory experimentation. Open to students having (1) a minimum of 15 hours of chemistry, (2) the ability to undertake independent work, and (3) permission of the instructor.

492 — Seminar

1-3 hrs. cr.

A seminar for upper division chemistry majors. The content of the course, depending on the students' needs, will vary from library research to special topics in chemistry. Prerequisite: senior standing or permission of the Department Head.

COMPUTER SCIENCE

Division of Technology

Carpenter, Cragin

The rapid increase in the use of electronic equipment in business and industry has created the need for the Computer Science programs. Students successfully completing one of these programs will find many opportunities for employment in banking, industry, and various governmental agencies. There are three available programs:

The Associate of Science degree in Computer Programming requires the completion of the General Education courses (see page 61 plus the following: Acct 101 and 102, Acct 211, Comp 100, Comp 110, Comp 120, Comp 130, Comp 140, Comp 150, Comp 200, Econ 201 and 202, GB 321, Math 140. This is a two-year program.

The Associate of Science degree in Electronic Data Processing Coordination prepares the graduate for immediate employment in tabulating departments in banks, industries, or governmental agencies. The student will become capable of simple program design and operation of tab equipment and will possess an extensive background in general secretarial work. The degree requires the completion of the General Education courses (see page 61) plus the following: Acct 101 and 102, Comp 100, Comp 110, Comp 120, Comp 130, GB 101, GB 321, Math 130, and OA 201. Electives should be selected, with approval of adviser, from the business areas of statistics, economics, shorthand, secretarial procedures, business law or office machines. This is a two-year program.

The Associate of Science degree in Computing Analysis prepares the graduate for entry into fields of science and engineering as a computer programmer. In this field the programmer confers

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with engineers, scientists and other officials concerned, to determine if data meets the needs of the problems and, if necessary, develop mathematical formulas and procedures to provide more efficient machine operation. The degree requires the completion of the General Education courses (see page 61) plus the following: Comp 120, Comp 130, Comp 140, Comp 150, Comp 220, Math 150, Math 250, Math 260, Math 322, Math 431, Math 361, Phys 250, and Phys 260. This is a two-year program.

100 — Basic Computing Machines 3 hrs. cr.

Illustrates the need for machines in accounting and record keeping, and demonstrates the concept, power, and flexibility of the unit record. Includes the unit records, machine functions, elements of a machine, card punch, verifier, interpreter, sorter, reproducing punch, collator, tabulators, and calculators and introduction to number systems. Basic problem analysis and logical block diagramming.

110 — Key-Punch Operation 3 hrs. cr.

Preliminary emphasis on basic mastery of the keyboard and mechanism of the key-punch. Latter portion of the course places emphasis on speed and accuracy of operation of both key-punch and E.A.M. equipment. Prerequisite: H. S. typewriting or OA 101. Daily.

120 — Introduction to Programming 3 hrs. cr.

An introduction to digital computers which includes: Basic principles, systems theory, decimal systems, arithmetic operations, self-complementing codes and other coding systems, computer logic, systems components, general block diagram and program functions, high speed memory, programming essentials, and solution of simple data processing problems. Two one-hour lectures; one two-hour laboratory per week. Prerequisites: Comp 100 and Math 130 or consent of instructor.

130 — Advanced Programming 3 hrs. cr.

The functions and capabilities of electronic data-processing machines, introducing student to some of the tools and raw material necessary for becoming a programmer. Includes computer applications, organization of the data processing system, instruction—card system; methods of program debugging, housekeeping techniques, loops and indexing, and subroutines. Two one-hour lectures; one two-hour laboratory per week. Prerequisite: Comp 120.

140 — Data Processing Applications 3 hrs. cr.

A continuation of 130. The principles presented in previous courses will be employed repeatedly in this course. Includes sub-

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routine, macro-programming, job timing, programming a random access device, and program testing. Latter portion of course involves individual projects in data processing from analysis through implementation. Two one-hour lectures; one three-hour laboratory per week. Prerequisite: Comp 130, or consent of instructor.

150 — Computer Machine and Machine Language 3 hrs. cr.

Provides the necessary foundation for study of business data processing. Usually includes the concepts of notation, binary system, octal system, systems conversions, representation of a number with an arbitrary base, fixed and floating point numbers, precisions and significances, and linear equations. Prerequisite: Comp 100 or consent of instructor. Three one-hour lectures.

200 — Systems Development and Design 3 hrs. cr.

Business systems design and development designed to guide the student through the evolution of a system, analysis of present information flow, system specifications and equipment selections, and implementation of the system. Includes the approach, requirements of a system, developing the solution, data controls, system controls, system evaluation, finalizing the system, and system implementation. Three one-hour lectures plus necessary arranged laboratory time. Prerequisite: Comp 140.

210 — Statics (See Physics 272) 3 hrs. cr.

220 — Analog Computers 3 hrs. cr.

Methods and techniques of solving simultaneous linear and non-linear differential equations on electronic analog computers. Includes the principles of multiplication and division and simulation of non-linear devices and systems. Two one-hour lectures; one two-hour laboratory per week.

250 — Introduction to Numerical Analysis 4 hrs. cr.

Digital computer programming, finite differences, numerical solution of non-linear systems, and differential equations. Problem solving on a digital computer. Must be preceded or taken simultaneously with Math 322. Three one-hour lectures; one two-hour laboratory per week.

COSMETOLOGY

The Associate of Science in Cosmetology has been developed to meet current licensure requirements for Missouri and adjacent states, general education requirements of Missouri Southern State College, and provide a background in business management

COSMETOLOGY

for individuals interested in establishing their own business or obtaining managerial positions.

The specialized cosmetology classes are conducted by an off-campus school of cosmetology. Credit for cosmetology courses will be granted only when these courses are taken at a school accredited by, or eligible for accreditation by, the Cosmetology Accrediting Commission and when taken as a part of the planned curriculum. Credit for cosmetology courses do not apply to other curricula.

The Associate of Science in Cosmetology requires, in addition to general education courses (see page 61), all courses in cosmetology, GB 101, GB 110, Acct 101, GB 220, Econ 201, MM 350, Psy 221, HPER 160 and Art 132.

In addition to established fees for all college students, special fees of \$120 for the first term and \$70 for each succeeding term, including summer, are required for enrollment in cosmetology courses.

COURSE DESCRIPTIONS

COS 100 — Introduction to Cosmetology 5 hrs. cr.

A beginning cosmetology course including orientation, sanitation, sterilization, and an introduction to anatomy and physiology as applied to cosmetology. Laboratory work includes demonstrations and practice in shampooing, fingerwaving and shaping, curl construction, cold waving, manicuring, color rinses and vegetable tints, facials, scalp treatments and basic hair cutting. Five hours lecture and 15 hours laboratory per week.

COS 110 — Theory and Practice of Cosmetology 5 hrs. cr.

Ethics of cosmetology, salesmanship and salon management plus applications of trichology, dermatology, onychology, bacteriology, electricity, physiology and anatomy. Laboratory work includes demonstrations and practice in hairstyling, make-up, permanent waving, scalp treatments, hair cutting, tinting and bleaching. Five hours lecture and 15 hours laboratory per week.

COS 120 — Cosmetology Practice and Procedures 5 hrs. cr.

Clinical practice in all phases of cosmetology in a salon setting. Special emphasis is given to dispensary work and reception. Students work on patrons. Five hours lecture and 35 hours laboratory per week. Summer course only.

COS 200 — Advanced Theory and Practice of Cosmetology **5 hrs. cr.**

Study of the chemical and physical changes of the hair, the chemistry of permanent wave lotions and hair straighteners. Clinical practice (salon work) emphasizes permanent hair color-

COURSES OF INSTRUCTION

ing, electrical scalp treatments and facials, hair shaping and electrical manicuring and pedicuring. Techniques of contest work are introduced. Five hours of lecture and 15 hours of lab per week.

COS 210 — Wig Training and Cosmetic Application 5 hrs. cr.

Emphasizes tints, bleaches and dye removers, the reconditioning of damaged hair and care and styling of both synthetic and human hair wigs. Advanced instruction in hair shaping, curl structure, combouts and setting patterns. Continuation of instruction in contest work, high-fashion styling and facial types. Five hours lecture, 15 hours salon work per week.

DRAFTING AND DESIGN

Division of Technology

Anderson, Coburn

The Drafting and Design curriculum is planned to provide students with the knowledge and skills necessary to enable them to obtain employment as draftsmen in the engineering and design departments of industry, with governmental agencies, consulting engineering firms, and architectural firms.

The Associate of Science degree in Drafting and Design requires the completion of the General Education courses (see page 61) plus the following: Draf 110, Draf 120, Draf 130, Draf 200, Draf 210, Draf 220, and Draf 230. Electives should be selected with the assistance of the student's adviser from the areas of physical science, business, and psychology.

110 — Introductory Drafting 3 hrs. cr.

An introduction to drafting, including the use of instruments, geometric construction, lettering, orthographic projection, dimensioning, sections and conventions, auxiliaries, pictorial drawing and print making. One hour lecture and four hours laboratory per week.

120 — Descriptive Geometry 3 hrs. cr.

Practical applications of principles to problems of geology and mining, mechanical and architectural engineering. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

130 — Machine Drafting 3 hrs. cr.

Detail and assembly drawing of machines, threaded fasteners, and gears. Use of machine tools, processes and materials. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

ECONOMICS

200 — Machine Design 3 hrs. cr.

An introduction to machine design. Advanced drafting techniques and procedures. Elements of machine design, redesigning and original problems. One hour lecture and four hours laboratory per week. Prerequisites: Draf 120 and Draf 130.

210 — Production Illustration 3 hrs. cr.

Pictorial drawing with emphasis on application to industrial production work. Methods of mechanical illustration, exploded views, design, layout techniques. One hour lecture and four hours laboratory per week. Prerequisites: Draf 120 and 130.

220 — Architectural Drafting 3 hrs. cr.

An introduction to the fundamentals of architectural drafting. Instruction in the principles of design; building details and use of modern construction materials. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110.

230 — Electrical and Pipe Drafting 3 hrs. cr.

The use and application of electronic components and equipment. Techniques of representing these principles graphically. Problems dealing with design and layout of piping systems. Specifications of parts of piping systems, valves, fittings, and other components. One hour lecture and four hours laboratory per week. Prerequisite: Draf 110 and 120.

ECONOMICS AND FINANCE

Division of Business Administration

Gray, Larimore, Leittle, Leon, Stengel, Tiede

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business Education degree.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 158.

201 — Principles of Economics (Macro) 3 hrs. cr.

A study of aggregate economic performance with emphasis on national income stabilization and growth, business cycles, monetary and fiscal policy, international trade, comparative economic systems, and current economic problems. Prerequisite: Sophomore standing or permission.

202 — Principles of Economics (Micro) 3 hrs. cr.

A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

COURSES OF INSTRUCTION

300 — Money and Banking 3 hrs. cr.

The constituents, nature, functions, creation, and destruction of money and credit; the monetary institutions and their functions, with special emphasis on the commercial banking system and the Federal Reserve System; introduction to monetary theory and policy. Prerequisite: Econ 201 and 202.

302 — Economic Growth and Development 3 hrs. cr.

Principles and problems involved in promoting development of the less mature economies, and growth in the more mature economies. Prerequisite: Econ 201 and 202.

350 — Corporate Finance 3 hrs. cr.

An examination of the financial structure of business organization, capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Econ 201 and 202, Acct 102.

401 — Microeconomic Analysis 3 hrs. cr.

An analytical study of the price systems, as affecting resource allocation and other welfare questions. Prerequisite: Econ 201 and 202.

402 — Macroeconomic Analysis 3 hrs. cr.

Study of the determination of the levels of real and monetary aggregate economic variables. Analysis of economic aspects of government regulation and direction of business enterprise. Prerequisite: Econ 201 and 202.

411 — Investments 3 hrs. cr.

Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; policies of companies and investing institutions; relations of investment policy to money markets and business fluctuations; security price-making forces. Prerequisite: Econ 350.

481 — Seminar in Economics and Finance 1-3 hrs. cr.

A seminar for upper division majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

482 — Independent Study in Economics and Finance 1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of economics and finance for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

EDUCATION

Division of Education and Psychology

Easterday, Highland, Mason, Niess, Sandrin,
Schuster, Snyder, Starkey, Steere, Wiley

TEACHER EDUCATION PROGRAM

Realizing the important contributions made to our society by its educational system, Missouri Southern State College has made the preparation of teachers one of the basic objectives of the institution. The College faculty supports the objective by recognizing the preparation of teachers as the responsibility of the entire College. It is fulfilled through the Council on Teacher Education which coordinates the teacher education phase of the various instructional divisions. The Department of Education has the overall responsibility for the actual administration of the Teacher Education Program.

The Teacher Education Program is based on the following basic beliefs and assumptions:

1. A teacher should be provided a broad background in general education.
2. A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching field.
3. A teacher should possess the personal qualities that can be identified as essential for effective teaching.
4. A teacher should demonstrate an understanding of the contribution education can make toward the continuation and improvement of our society.
5. A teacher should possess the professional attitudes and competences necessary to serve the education profession effectively.

As a reflection of these beliefs and assumptions, the College seeks to achieve these aims through the Teacher Education Program:

1. To provide the graduates of high schools in the College service area with information on teaching as a profession.
2. To identify and attract to the program of teacher education students who possess the intellectual, personal and physical qualities necessary to become effective teachers.
3. To provide a program of studies and experiences that will develop graduates capable of effectively performing their duties as teachers in the elementary or secondary school.
4. To provide prospective teachers with a program that emphasizes the importance of the basic theories of learning in teaching.

COURSES OF INSTRUCTION

5. To cooperate with local, state, regional, and national agencies that have as their purpose the improvement of education.
6. To aid school administrators, boards of education, and other educational organizations with problems relating to education programs.

Bachelor of Science in Education Degree

Students who are planning a career in teaching in the elementary and/or secondary school work toward the degree Bachelor of Science in Education. The satisfactory completion of the requirements for this degree qualifies a person for life certification in Missouri. Recipients of other degrees, who later decide to teach, can be certified through the State Department of Education by meeting the requirements outlined by the Director of Teacher Education.

Students deciding to work toward the degree Bachelor of Science in Education must elect to major in elementary education or in one of the subject matter areas available to those seeking a secondary certificate.

Elementary Education — If preparation for teaching at the elementary school level is desired, the student may emphasize either primary or intermediate grades. Elementary majors are required, also, to select an area of concentration of 21 semester hours from art, business education, science (biological and physical), mathematics, social science, language arts (English and speech), music, health and physical education, and selected areas of special education. Applicable general education course requirements may also count toward the selected area of concentration.

A student specializing in elementary education must complete these additional or specific general education courses:

1. One additional course in mathematics
2. Geography must be selected from Area 2,
the Social and Behavioral Sciences
3. One additional course in U. S. History
4. A course in economics is strongly recommended

Candidates for the degree Bachelor of Science in education with a major in elementary education must satisfactorily complete 33 semester hours, including the following required courses: Bio 310, Eng 222, Music 262, Art 220, Eng 200 or Eng 301, Psy 302, HPER 311, Educ 492, Educ 311, Educ 312, Educ 340, Educ 370; select one of the following: Educ 351 or Educ 352 or Educ 420 or Educ 360 or Speech 492.

Special Education

An area of concentration is offered in three areas of special education. Each of these programs is designed to support a major in either elementary or secondary education, preferably elementary. Persons preparing to teach at the secondary level can also qualify for certification in any of the special education areas listed below. However, several basic elementary education courses will also need to be completed. Persons interested in such certification for teaching special education at the secondary level should check with the Department of Education for details and requirements.

The following additional courses must be satisfactorily completed for certification to teach the:

Educable Mentally Retarded Child — Psy 200 or Psy 210, Psy 302, Educ 351, Educ 492, Speech 492, Psy 221 or Psy 432, Psy 412, Educ 420 or Psy 471, and two of the following: Soc 110, Psy 422, Educ 352, or Educ 360.

For certification to teach children with Learning Disabilities, substitute Educ 352 for Educ 351.

For certification to teach the Emotionally Disturbed Child, substitute Educ 361 for Educ 351.

Three semester hours of the supervised teaching assignment must be completed in the area of special education in which the student decides to specialize.

Remedial Reading Certification — A person who completes a baccalaureate degree with a teaching major may also be certified in the field of remedial reading by satisfactorily completing the following courses: Educ 302, Educ 340 or Educ 422, Educ 492, Psy 471, Educ 471, Educ 472.

Secondary Education — The student who desires to teach in a secondary school may choose to become qualified in a single teaching field with a high degree of specialization, or in two different teaching fields with a lesser degree of specialization in each. Available for secondary school teaching are:

1. Art	8. Music
2. Biology	9. Physical Education
3. Chemistry	10. Physics
4. Business Education	11. Physical Science
5. English	12. Social Science
6. Spanish	13. Speech and Drama
7. Mathematics	

A student may elect a supporting area (a minor) from any one of the thirteen listed majors.

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Under certain circumstances, it is possible for a person to become qualified to teach art, music, or physical education at both the elementary and secondary school level. Students interested in such a program should consult the department involved.

Students interested in certification to teach **driver education** or to **coach interscholastic sports** should consult the Physical Education Department.

A student emphasizing secondary education must also complete departmental course requirements under either Plan A or Plan B.

Plan A: (Double Major)

This plan is intended for those persons who desire to qualify as teachers in two different subject matter areas. Each area requires 30 semester hours of specific course work or the minimum State Department of Education requirement. Plan A is not available in social science, music, or in programs preparing teachers for both elementary and secondary certification. If Plan A is selected, the second teaching field is required.

Plan B: (Single Teaching Field)

This plan is intended for the person who wishes to concentrate his teacher preparation in one subject matter area only. Thirty-six or more semester hours are required in the subject matter area or related supporting courses listed in this catalog by the department.

A person choosing a single teaching field may also earn a minor of 21 semester hours of specific course work in some other or related field, which will qualify him for a second teaching field at the junior high school level only.

Each department that prepares students for secondary school teaching has developed a program of studies to be pursued by students who choose to follow either of the above plans. Plan B is mandatory for majors in social science, music, and in certain programs preparing students for dual certification at both the elementary and secondary school level.

Advisement

Each student who enrolls at Missouri Southern will have an adviser assigned who will help the student plan his program of studies. All freshmen are advised by the Student Personnel Services. A student above the freshmen level will have faculty advisers assigned by the division in which he chooses to specialize. The Division of Education advises only majors in elementary education and physical education.

Information regarding teacher certification requirements, employment opportunities, professional education requirements, and

supervised student teaching may be obtained from the Department of Education.

ADMISSION TO THE TEACHER EDUCATION PROGRAM

Admission to Missouri Southern State College does not automatically confer admission to the Teacher Education Program.

Students who plan to enter the professional education sequence and become certified teachers are required to apply for admission to the Teacher Education Program. This application is made at the time the student is enrolled in Psychology of Human Development or during the sophomore year. The application form may also be obtained from the Education Office. Each application is reviewed individually by the Teacher Selection Committee.

In determining a student's fitness for the teaching profession, the committee considers test results, scholarship, English proficiency, experience with children and youth, autobiography, physical and mental health, and other appropriate faculty recommendations. The minimum scholarship essential to acceptance is a grade point average of 2.2 on 55 or more semester hours.

The Committee decisions on student applications fall into three categories: (1) Approved for admission to the teacher education program; (2) Approved on the condition that certain stated requirements be met; or (3) Advised not to continue in teacher education. The student must have acceptance into the program before he is admitted to the professional education sequence of courses.

Supervised Teaching

A second point of selection in the Teacher Education program occurs when the student is ready to do supervised teaching during the "Professional Semester" of the senior year. To qualify for supervised teaching, the student must have attained a minimum 2.2 cumulative grade point average at the time of application and be recommended for student teaching by the major department. Exceptions to this requirement will not be allowed unless approved by the Teacher Selection Committee. The National Teachers Examination is taken by all persons that enroll in supervised teaching.

PROFESSIONAL EDUCATION

The following sequence of courses is to be completed by students planning to teach at the secondary or elementary level:

Freshman-Sophomore Year

Three or more hours of development psychology selected from Psy 110, Psychology of Human Development; Psy 200, Child Psychology or Psy 210, Adolescent Psychology. Persons who are

COURSES OF INSTRUCTION

planning to teach should choose Psy 110 in their first year of study.

Junior Year

*Psy 310	Educational Psychology	3 hours
Educ 320	Structure of Teaching, Elementary	4 hours
Educ 321	Video Teaching Laboratory	1 hour
or		
Educ 330	Structure of Teaching, Secondary	4 hours
Educ 331	Video Teaching Laboratory	1 hour

* May be taken in sophomore year

Senior Year

The "Professional Semester" occupies one complete semester. For one-half of the professional semester, the student carries four courses and during the other one-half does supervised teaching (approximately eight weeks). Courses outside of this block may not be scheduled. Required courses are:

Secondary Teaching

Educ 462	Student Teaching, Secondary
Educ 432	Critical Issues in Education
Educ 402	History and Philosophy of Education
Select one of the following:	
Psy 412	Measurement and Evaluation
or	
Psy 451	Psychology of Learning
or	
Educ 412	Social Foundations of Curriculum

Elementary Teaching

Educ 442	Student Teaching, Elementary
Educ 432	Critical Issues in Education
Educ 402	Philosophy and History of Education
Select one of the following:	
Psy 412	Measurement and Evaluation
or	
Educ 420	Introduction to Counseling
or	
Educ 412	Social Foundation of Curriculum Development

Combination of Elementary and Secondary Teaching

For students majoring in art, music, foreign language or physical education who desire certification at both the elementary and secondary levels, the following professional semester is recommended:

Educ 444 Student Teaching, Elementary
Educ 464 Student Teaching, Secondary
Educ 432 Critical Issues in Education
Educ 402 Philosophy and History of Education
Select one of the following:
Psy 412 Measurement and Evaluation
Psy 451 Psychology of Learning
Educ 412 Social Foundations of Curriculum Development

TEACHER CERTIFICATION BY "ACADEMIC CONTRACT"

The Missouri State Department of Education has designed a procedure whereby college graduates who did not take a prescribed teacher education program in their degree programs can meet the necessary requirements to become a certified teacher by filing an "Academic Contract" with certain approved colleges and universities. The designated college is responsible for informing the State Department of Education what credit will be needed for certification and for the recommendation to issue the teaching certificate.

An "Academic Contract" may be executed with Missouri Southern State College on the condition that the person qualifies for admission into its teacher education program and has been properly enrolled in the college. All regular graduates of the teacher education program at Missouri Southern are awarded certification upon the recommendation of the Division of Education.

EDUCATION COURSE OFFERINGS**010 — Techniques of Reading** **2 hrs. cr.**

A reading improvement program consisting of group and individual work, intended primarily for students needing remedial work in reading. Individual diagnostic reading tests determine student needs. (Cannot be applied to any degree.)

302 — The Exceptional Child **2 hrs. cr.**
(See Psychology 302)**311 — Science in the Elementary School** **2 hrs. cr.**

Emphasis on science in the child's environment. Development of problems, activities, and experiments. Survey and evaluation of teaching materials and laboratory equipment suitable to the elementary school. Prerequisite: Courses in biological and physical science.

312 — Problems of Teaching Arithmetic in Elementary Schools (See Math 312) **2 hrs. cr.**

Basic course in the teaching of arithmetic in the elementary

COURSES OF INSTRUCTION

grades. The application of principles of learning and techniques of presentation are considered. Prerequisite: 3 hours math.

320 — Structure of Teaching—Elementary 4 hrs. cr.

An integrated course including problems related to teaching in the elementary school with special attention given to teaching social studies in the elementary grades. The acquisition of instructional skills and strategies and the demonstration of the ability to apply appropriate skills and strategies to the teacher-learner situation is expected. Classroom organization, and management, instructional innovations and both verbal and non-verbal interaction skills are studied. Actual classroom participation in a public school is required. The course is team taught. Enrollment in a video-teaching lab (Educ 321) must be concurrent. Prerequisites: Psy 200 or 110, and Psy 310 and G. P. A. of not less than 2.1.

321 — Video Teaching Laboratory 1 hr. cr.

A required part of Educ 320 and must be taken concurrently with it. Short teaching episodes are prepared, taught and analyzed via video-tape. The basic concern is with the demonstration of effective teaching skills.

330 — Structure of Teaching—Secondary 4 hrs. cr.

A study of the instructional skills, strategies and techniques of teaching in the secondary school. Included is the study of specialized techniques and materials of the student's major area. Development of the secondary school, classroom organization and management, instructional innovations, and both verbal and non-verbal interaction are studied. Actual participation in a public school classroom and field trips are required. The course is team taught involving instructors from all departments offering a major. Enrollment in a video-teaching lab (Ed 331) must be concurrent. Prerequisites: Psy 200 or 210, or 110 and Psy 310 and a G. P. A. of not less than 2.1.

331 — Video Teaching Laboratory 1 hr. cr.

A required part of Educ 330 and must be taken concurrently with it. Short teaching episodes are prepared, taught, and analyzed via video-tape recordings. The basic concern is with demonstration of effective teaching skills.

340 — Language Arts and Reading in the Elementary School 5 hrs. cr.

Foundation course for development of understanding attitudes necessary to teach written and oral communication, listening, and reading at the elementary level.

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351 — Teaching the Mentally Retarded 3 hrs. cr.

Designed to help the prospective or in-service teacher understand mental retardation. Attention is given to courses, diagnosis, and teaching methods especially suited to mentally retarded children. Prerequisite: Psy 302.

352 — Methods of Teaching Children with Learning Disabilities 3 hrs. cr.

Prepares teachers in the area of learning disabilities with particular attention to verbal communication disorders and visual motor integration problems. Diagnosis methodology techniques and media will be stressed. Prerequisite: Psy 302.

360 — Methods of Teaching the Emotionally Disturbed Child 3 hrs. cr.

Establishes a teaching rationale utilizing a completely individualized program with a variety of teaching techniques which enable the emotionally disturbed learner to profit more fully from his school experiences. Prerequisite: Psy 302.

370 — Introduction to Instructional Media 2 hrs. cr.

Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Enrollment limited to education majors.

402 — Philosophy and History of Education 3 hrs. cr.

Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to building a personal philosophy of education. Prerequisite: Admission to Teacher Education.

412 — Social Foundations of Curriculum Development 3 hrs. cr.

Social Foundations of Curriculum and instruction as it relates to the elementary and secondary schools; consider the psychological, sociological, and philosophical basis for curriculum building. Emphasis is on social foundations. Prerequisite: Admission to Teacher Education.

420 — Introduction to Counseling 2-3 hrs. cr.

Survey of counseling philosophies, principles and practices. Designed for the classroom teacher as well as the guidance specialist, and is a basic course in the guidance sequence. Prerequisite: Psy 302.

422 — Teaching Reading in Secondary Schools 2 hrs. cr.

Designed to help prospective teachers understand reading development and its part in the total school program. Required for certification of secondary teachers of English in Missouri.

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432 — Critical Issues in Education	3 hrs. cr.
Current problems in the area of education are explored, with special regard to legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certification, salary schedules, retirement and other benefits, professional organizations for teachers, relationship with administration, pupils, parents, and the community. Prerequisite: Admission to Teacher Education.	
442 — Student Teaching—Elementary	6 hrs. cr.
Participation, under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 88 semester hours with a grade point average of 2.2, admission to the program of teacher education, and Educ 320. Course assignments will include full-time supervised teaching and one-half of the semester. Students whose last names begin with the letters A-L should plan to enroll in first semester. M-Z in second semester. Additional general conferences are scheduled as needed. Specific assignment is made by the Department of Education.	
443 — Student Teaching—Elementary	6 hrs. cr.
Participation, under supervision, on the elementary level in an off-campus school. Curriculum participation and observation consists of daily three-hour period of time during regular semester. Prerequisite: See Educ 442.	
444 — Student Teaching—Elementary	3 hrs. cr.
Designed to be taken concurrently with secondary student teaching to provide an experience at both levels when dual level certificate is sought. Prerequisite: See Educ 442. Course assignment to consist of a minimum of 15 hours a week of student teaching for one-half semester. Conferences will be scheduled as needed. Specific assignment is made by Department of Education.	
462 — Student Teaching—Secondary	6 hrs. cr.
Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials and methods integrated with student teaching. Prerequisite: Educ 330 or equivalent, fifteen semester hours in teaching field, and a minimum of 88 semester hours with a grade point average of 2.2. Assignment to consist of full-time teaching for one-half semester with professional courses to be taken during other half of semester. Students whose last names begin with the letters A-L should plan to enroll in first semester. M-Z in second semester. Additional conferences are scheduled as needed. Specific assignment is made by Department of Education.	

EDUCATION**463 — Student Teaching—Secondary** **6 hrs. cr.**

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with student teaching. Prerequisites: See Educ 462. Assignment to consist of daily three-hour block of time during a regular semester.

464 — Student Teaching—Secondary **3 hrs. cr.**

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with teaching participation and observation. Designed to be taken concurrently with elementary student teaching to provide an experience at both levels when dual level certificate is sought. Prerequisites: See Educ 462. Assignments consist of a minimum fifteen hours per week of participation and conferences for one-half the semester. Specific assignments are made by Department of Education.

471 — Practicum in Diagnosis of Reading Difficulties **3 hrs. cr.**

Practice of administering, interpreting, and reporting of diagnostic test results of reading difficulties. Prerequisites: A methods course in the teaching of reading (Education 340 or Education 422), A Methods course in the analysis and correction of reading problems (Education 492), and a course in individual intelligence tests (Psychology 471).

472 — Practicum in Remediation of Reading Difficulties **3 hrs. cr.**

Practice of using and reporting results of remedial methods in a case study of reading difficulties. Prerequisites: A Methods Course in Teaching (Education 340 or Education 422), A Methods Course in the Analysis of Correction of Reading Problems (Education 492), and a course in Individual Intelligence Tests (Psychology 471), and Education 471.

480 — Seminar in Problems of Education **1-3 hrs. cr.**

A seminar for upper division majors only. The seminar meets regularly each week. Meeting is equal to the number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

490 — Independent Study **1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by advisor and department head.

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492 — Techniques of Diagnostic and Remedial Instruction in Reading

2 hrs. cr.

A study of devices and techniques for diagnosis of reading disabilities and presentation of suggested remedial measures and methods of reducing deficiencies. Practical applications and laboratory experience will be emphasized. Special emphasis upon intermediate and secondary school reading problems. Prerequisite: Educ 340 or 422.

ENGLISH

Department of Language and Literature

Blevins, Couch, Dinges, Gardner, Greenlee, Harder,
Headlee, Lambert, McCormick, Mitchell, Morgan,
Preble, Short, Slanina, Walters, Wolfe

A major for the Bachelor of Arts degree consists of 42 semester hours (above freshman composition) and must include Eng 210, Eng 220, Eng 311, Eng 312, either Eng 301 or Eng 310, and either Eng 216 or Eng 315.

English may be used as a minor or supporting area with certain majors. A minor consists of 21 semester hours (above freshman composition) and shall include 12 upper division hours. The student shall select the courses in consultation with an English advisor.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 42 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng 210, Eng 220, Eng 311, Eng 312, Eng 315, Eng 319, either Eng 301 or Eng 310, either Eng 331 or Eng 332; one course from Eng 431, Eng 411, Eng 452; one course from Eng 421, Eng 361, Eng 371; one course from Eng 322, Eng 220, Eng 381, Eng 481. See page 91 for teacher education requirements.

A major for the Bachelor of Science in Education degree as one of two teaching fields (Plan A) consists of 30 semester hours of English and Education 422. Required English courses are Eng 210, Eng 220, Eng 311, Eng 312, Eng 315; either Eng 301 or Eng 310; either Eng 331 or Eng 332.

English 101 is a prerequisite to all literature courses except Eng 120 and Eng 130. A lower division literature course is prerequisite to all upper division literature courses except Eng 311 and Eng 312.

ENGLISH**90 — Composition****3 hrs. cr.**

A course designed for students whose placement scores indicate a need for additional work. Three hours of class work and two hours of laboratory per week. No credit toward an associate degree or a baccalaureate degree. Course grade is recorded pass or fail.

101-102 — Composition**(per sem.) 3 hrs. cr.**

(101) A study of the principles of effective writing based largely upon expository prose models. Students demonstrating exceptional ability may be permitted to substitute English 111; (102) Develops reading comprehension through a study of various types of literature and offers practice in expository writing. Must be taken in sequence.

111 — Composition**3 hrs. cr.**

A special composition and literature course for freshmen demonstrating exceptional proficiency on placement tests. With a grade of C or better in English 111, a student automatically receives three hours credit for English 101, thereby satisfying the six-hour composition requirement. He enriches his 124-hour graduation program by enrolling for a course in another area in lieu of a second freshman composition course. Should he receive a D in English 111, however, he must take English 102.

120, 130—Masterpieces of World Literature (per sem.) 3 hrs. cr.

(120) Selected masterpieces of world literature through the Renaissance, except British literature; (130) From the Renaissance to the present except British literature.

210 — English Literature**3 hrs. cr.**

Survey of English Literature to the Romantic Movement. Prerequisite: English 101.

216 — Creative Writing**3 hrs. cr.**

Experimental writing in prose, poetry, and drama. A study of the writer's roles and technical approaches to literature in order to develop creative writing skills. Prerequisite: English 102.

220 — English Literature**3 hrs. cr.**

Survey of English Literature from the Romantic Movement to the present. Prerequisite: English 101.

222 — Children's Literature**3 hrs. cr.**

A reading, lecture, and observation course for elementary education students, including evaluation of children's literature, its historical development, and its uses in elementary school.

COURSES OF INSTRUCTION

231 — Literature for Adolescents 3 hrs. cr.
An extensive reading course for secondary education students, including some evaluation of literature for adolescents and its presentation in the secondary school.

232 — American Negro Literature 3 hrs. cr.
All representative literary genres illustrating the growth of American Negro literature. Prerequisite: English 101.

301 — Modern Grammar 3 hrs. cr.
An investigation of current grammatical studies of modern English structure and usage, emphasizing transformational generative grammar.

310 — History of the English Language 3 hrs. cr.
An examination of the ancestors of English and the effect of other languages, peoples, and cultures upon its development. An investigation of the phonology, morphology, syntax, and usage of the language throughout its history.

311, 312.— American Literature (per sem.) 3 hrs. cr.
(311) A survey of American literature to the Civil War; (312) Survey of American literature beginning with the Civil War.

315 — Exposition 3 hrs. cr.
A study of the techniques of factual writing and the writing of non-fiction. Recommended for all students especially those entering professional schools. Prerequisite: Six hours composition.

319 — Composition for Teachers 3 hrs. cr.
Designed to aid the prospective teacher of English in formulating principles of composition, in discovering techniques of application, and in correlating the principles of grammar with the teaching of composition in the secondary school.

322 — Twentieth Century Drama 3 hrs. cr.
Plays in English from Shaw to the present time, with selected readings in European playwrights.

331, 332 — Shakespeare (per sem.) 3 hrs. cr.
(331) A study of selected histories, early comedies, and sonnets; (332) A study of selected tragedies and late comedies.

342 — American Novel 3 hrs. cr.
A study of representative American novels.

361 — The Romantic Period 3 hrs. cr.
Representative authors and literary tendencies. Prerequisite: Eng 220.

FOREIGN LANGUAGES

371 — The Victorian Period 3 hrs. cr.
Representative authors and literary tendencies. Prerequisite: Eng 220.

381 — The English Novel 3 hrs. cr.
Representative English novels from 1700 to the present.

411 — Literature of the English Renaissance 3 hrs. cr.
Poetry and prose of the English Renaissance to 1603. Elizabethan and Jacobean drama, excluding Shakespeare. Prerequisite: Eng 210.

421 — Eighteenth Century English Literature 3 hrs. cr.
The enlightenment and the decline of neoclassicism in literature from 1700 to 1785, Pope to Johnson. Prerequisite: Eng 210.

431 — Medieval English Literature 3 hrs. cr.
Literature of England in the Anglo-Saxon and Middle English period. Emphasis upon Chaucer. Prerequisite: Eng 210.

432 — Milton 3 hrs. cr.
A study of the poetry and major prose. Prerequisite: Eng 210.

440 — Explorations in Literature 3 hrs. cr.
Seminar in literature for advanced majors. Topic open.

452 — Seventeenth Century English Literature 3 hrs. cr.
Study of the art and thought in English literature from 1603 to 1700. Prerequisite: Eng 210.

481 — Twentieth Century Poetry 3 hrs. cr.
Representative Poetry from Yeats to the present.

490 — Independent Study 1-3 hrs. cr.
Individually directed study in selected areas for advanced majors. Prerequisite: a grade point average of 3.0 in English and permission.

FOREIGN LANGUAGES

Division of Arts and Sciences

Department of Language and Literature

Bodon, Colon, Studerus

The Department of Foreign Languages offers a full curriculum of courses in Spanish, with supporting courses in French and German. A language laboratory is used in all beginning courses.

COURSES OF INSTRUCTION

A major for the Bachelor of Arts degree in Spanish consists of 40 semester hours and includes the same courses as for the Bachelor of Science in Education degree in the following paragraph.

A major for the Bachelor of Science in Education degree with Spanish as the single teaching field (Plan B) consists of 40 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302, Span 321, 322, Span 332, Span 421, Span 431, and Span 434.

A major for the Bachelor of Science in Education degree with Spanish as one of two teaching fields (Plan A) consists of 31 semester hours. The required courses are Span 101-102, Span 201, Span 202, Span 301, Span 302, and one course out of Span 321, 322, or 332.

A minor in Spanish consists of 21 semester hours (not adequate for a teaching certificate in the language unless one has a major in another language) and includes Spanish 101-102, Span 201, Span 202, one course of Span 301 or 302, and one course out of Span 321, 322, or 332.

The foreign language requirement for the Bachelor of Arts degree can be fulfilled by any of the following methods:

1. By passing appropriate examinations a student may exempt all or part of the requirement and receive college credit for the hours exempted.
2. A student who does not elect option one but who wishes advanced placement may fulfill the requirement with from 6-8 credit hours of courses.
3. Any student may fulfill the requirement by completing the 101-102 sequences, 10 credit hours.

Advanced placement shall not waive the two semester language requirement for all A.B. degree candidates.

FRENCH

101-102 — Beginning French (per sem.) 5 hrs. cr.

(101) Stresses conversation, pronunciation, essentials of grammar and diction. (102) Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required in both semesters.

201 — Readings in French Literature 3 hrs. cr.

Intermediate reading. Discussion of literature in French. Emphasis on vocabulary building. Grammar review. Prerequisite: Fren 102 or equivalent.

202 — Advanced Readings in French Literature 3 hrs. cr.

Representative works read and discussed in French. Short stories, a novel and poetry. Prerequisite: Fren 201 or equivalent.

FOREIGN LANGUAGES

301 — French Composition 3 hrs. cr.

Practice in writing French accompanied by a thorough study of grammar and syntax. Prerequisite: French 202 or equivalent.

302 — Advanced French Composition 3 hrs. cr.

Practice in writing French compositions. Thorough study of grammar, syntax, and idiomatic expressions. Prerequisite: Fren 301.

321, 322 — Survey of French Literature (per sem.) 3 hrs. cr.

(321) Study of French Literature from its origins through the seventeenth century. Prerequisite: Fren 302 or equivalent. (322) French literature of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Fren 321.

GERMAN

101-102 — Beginning German (per sem.) 5 hrs. cr.

(101) Stresses conversation, pronunciation, essentials of grammar and diction. (102) Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required each semester.

201 — Readings in German Literature 3 hrs. cr.

Intermediate reading. Discussion of literature in German. Emphasis on vocabulary building. Grammar review. Prerequisite: Ger 102 or equivalent.

202 — Introduction to German Literature 3 hrs. cr.

Representative works are read and discussed in German with emphasis on conversation, syntax, and literary significance. Prerequisite: Ger 201 or equivalent.

SPANISH

101-102 — Beginning Spanish (per sem.) 5 hrs. cr.

(101) Conversation and reading and writing. Pronunciation proficiency and grammar essentials. Conducted in Spanish as far as practicable. Language laboratory required. (102) Continuation of 101.

201 — Intermediate Readings and Conversation 3 hrs. cr.

Reading and discussion of literature. Emphasis is on vocabulary building and grammar review.

202 — Introduction to Spanish Literature 3 hrs. cr.

Representative works are read and discussed in Spanish with emphasis on conversation, syntax, and literary significance. Prerequisite: Span 201.

COURSES OF INSTRUCTION

301 — Spanish Composition 3 hrs. cr.

Practice in writing Spanish accompanied by a thorough study of grammar and syntax. Prerequisite: Span 202.

302 — Advanced Spanish Composition 3 hrs. cr.

Practice in writing Spanish accompanied by thorough study of grammar and syntax with emphasis on subtle elements of idiomatic usage. Prerequisite: Span 301.

321, 322 — Survey of Spanish Literature (per sem.) 3 hrs. cr.

(321) The literary background and important writers from the origin of Spanish literature to 1700. Representative works are read and discussed critically, with written and oral reports.
(322) 1700 to the present. Prerequisite: Span 202.

332 — Introduction to Spanish-American Literature 3 hrs. cr.

Representative works of poetry, short story, and essay are read and discussed. Prerequisite: Span 301, 302.

421 — Nineteenth Century Spanish Novel 3 hrs. cr.

The Spanish novel as an art form, exemplified by selected works by such writers as Alarcon, Valera, Pereda, Galdos, Pardo-Bazan, Palacio Valdes, and Blasco Ibanez. Prerequisite: Span 322.

431 — Don Quixote 3 hrs. cr.

The source, structure, characters, language, and style of Cervantes' masterpiece. Prerequisite: Span 321.

434 — The Spanish American Novel 3 hrs. cr.

Origin and development of the Spanish American Novel, its political, social, geographical and literary influence. Prerequisite: 20 hours of Spanish.

GEOGRAPHY

Division of Arts and Sciences

Gockel, Stout

211 — Regions and Nations 3 hrs. cr.

A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

222 — Economic Geography 3 hrs. cr.

A study of world commodities and the geographic factors which affect their production and make them significant to world economy.

GEOLOGY—HEALTH

311 — Political Geography **3 hrs. cr.**

A study of the geographic factors which have influenced international relations and the policies of nations as political units. Geopolitics, religion, racial and ethnic groupings and other factors which contribute to unity or disunity will be emphasized.

412 — Geography of Latin America **3 hrs. cr.**

A study of the physical regions and natural resources of South America, Central America and the Caribbean Islands with special emphasis on current problems and relations with the United States.

GEOLOGY

Division of Arts and Sciences

Gier

GEOL 110 — Introduction to Geology. **5 hrs. cr.**

The materials of the earth and those forces producing physiographic changes. Three lectures and two, two-hour laboratory or field trips a week.

HEALTH FACILITIES ADMINISTRATION

Division of Technology

Courses in this field are designed to give individuals currently in management or supervisory positions in health care facilities, or those individuals planning to attain such positions, an insight into the applications of the principles of Administration and Management techniques to these institutions.

HA 200 — Health Facilities Administration and Management **3 hrs. cr.**

The principles and practice of the administration of health facilities. Includes a study of the various types of facilities and their relation to each other and problems of administration and management unique to such facilities. Three one-hour lectures per week.

HA 210 — The Administration and Management of the Long-Term Care Facility **3 hrs. cr.**

The problems unique to the long-term care facility including responsibilities for patient welfare, the relation to other health care facilities and to governmental agencies of various levels. Prerequisite HA 200 or consent of the instructor. Three one-hour lectures per week.

COURSES OF INSTRUCTION

ENVIRONMENTAL HEALTH TECHNOLOGY

The Environmental Health Technology Curricula for both Associate of Science and Bachelor of Science degrees are affiliation programs in which students complete general education and supportive course work at Missouri Southern State College and take applied course work and special laboratory training at the Water and Wastewater Technical School at Neosho, Missouri. The curricula are designed so that the student may complete requirements at either school first. Some variation in course requirements at each institution are made in consideration of the background of the student and whether work is completed at the Water and Wastewater Technical School before entering Missouri Southern State College or visa versa. In either case Missouri Southern State College will grant no more than 30 hours of credit toward either the Associate or Bachelors degree for the applied course work at the Water and Wastewater Technical School.

Fees for these programs are the same as fees for any other students at the respective schools. These fees are stated in the current catalogs of each institution.

For the Associate of Science degree course requirements, in addition to the general education requirements, are Chem 101, Chem 102, Bio 120 and Bio 211 (or Bio 312 and Bio 314 for students completing courses at the Water and Wastewater Technical School prior to attending Missouri Southern State College).

For the Bachelor of Science degree course requirements, in addition to the general education requirements, are Bio 160, Bio 110, Bio 211, Bio 312, Bio 314, Bio 431, Bio 442, Chem 101, Chem 102, Chem 162, Chem 201, Chem 300, Acct 101, Econ 201, MM 350 and MM 352.

In each curriculum the student must complete a minimum of 36 weeks of course work at the Water and Wastewater Technical School.

HISTORY

Division of Arts and Sciences

Cooper, Holman, Hughes, Markman,
Renner, Schafer, Stout

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A history major for this degree consists of 30 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or

HISTORY

202, 6 upper division semester hours in United States History, 6 upper division semester hours in European History and 6 upper division hours in history electives.

History may also be used as a minor or supporting area with certain majors. The requirements are 21 semester hours: Hist 110, Hist 120, Hist 200, Hist 201 or 202 and 9 upper division hours in history.

A social science major for the Bachelor of Science in Education degree, with an emphasis in history, consists of 49 semester hours. (Plan B must be followed with this major, see Education, page .) The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, PSc 120, PSc 210, 6 upper division semester hours in United States History, 6 upper division hours in European History and 6 upper division semester hours in history electives. For the remaining 13 hours the candidate will choose Econ 202 and at least one course from each of the social science areas (i.e., political science, geography and sociology) beyond the general education courses. The student is encouraged to select courses in the other areas of social science in as much depth as possible within the 13 hours. See page for teacher education requirements.

110 — United States History 1492-1877 3 hrs. cr.

A survey study of the United States from the "Age of Discovery and Exploration" through reconstruction.

120 — United States History 1877 to the Present 3 hrs. cr.

A continuation of course 110. This course is a survey study of the economic, social and political development of the United States from 1877 to the present.

200 — Western Civilization to 1500 3 hrs. cr.

A survey of the development and progress of western civilization from prehistoric times through 1500. The course surveys the contributions of the early peoples to civilization as well as feudalism, the Church, the crusades, and the Renaissance. Attention is also given to oriental civilizations.

201 — Europe 1500 to 1815 3 hrs. cr.

A survey study of Europe from the Renaissance and the Reformation to Waterloo. Emphasis is placed on the origin and development of the modern states system after 1500 as well as the social and cultural developments of the era.

202 — Europe 1815 to the Present 3 hrs. cr.

A survey study of Europe in the 19th and 20th centuries. Emphasis is placed on political, social and economic developments accelerating the growth of liberalism, nationalism and imperialism.

COURSES OF INSTRUCTION

301 — United States Social and Intellectual History 3 hrs. cr.

A study of thoughts and ideas that have influenced the intellectual, cultural and social aspects of United States History from colonial times to 1877. Prerequisite: Hist 110.

302 — United States Social and Intellectual History 3 hrs. cr.

A continuation of History 301. A study of the social and cultural aspects of the United States during the period of its great industrial expansion and emergence as a major world power. Prerequisite: Hist 110 or 120.

321 — Ancient History 3 hrs. cr.

A study of ancient times from the prehistoric period to the end of the Roman Empire. Special consideration is given to the Ancient Empires and their contributions to literature, art, religion, and science against a political, economic and social background. Prerequisite: Hist 200, 201, or 202.

322 — Medieval History 3 hrs. cr.

A study of Europe from the end of the Roman Empire to 1500. Emphasis is placed on the significant historical aspects of the medieval period such as feudalism, the Church, the Crusades and the Renaissance. Prerequisite: Hist 200, 201 or 202.

331 — Economic History of the United States 3 hrs. cr.

A study of the development of the American economy and its related institutions from colonial times to the present. Prerequisite: Hist 110 or 120.

341 — The American Frontier 3 hrs. cr.

The westward expansion of the United States and its effects upon the social, political and economic institutions until the close of the frontier in 1890. Prerequisite: Hist 110 or 120.

352 — Europe Since 1919 3 hrs. cr.

The aftermath of World Wars I and II in Europe. Emphasis is placed on the formation of the League, collective security, a study of the totalitarian systems, the United Nations and current problems of world peace. Prerequisite: Hist 200.

361 — The English Colonies in America 3 hrs. cr.

A study of the progress and development of the English Colonies from 1492 to 1776. Emphasis is placed on the extension of English social, political and economic institutions as a background for the American Revolution. Prerequisite: Hist 110.

371 — English History to 1660 3 hrs. cr.

A survey of the rise and development of the English people from the Roman conquest to the Stuart Restoration. Emphasis

HISTORY

is placed upon English Constitutional development and related institutions. Prerequisite: Hist 200.

372 — English History from 1660 **3 hrs. cr.**

A continuation of History 371. This is a survey of English History from the Restoration to the present. Attention is placed on the development of the cabinet system and the emergence of modern political democracy. Prerequisite: Hist 200.

381 — Diplomatic History of the United States to 1900 **3 hrs. cr.**

A study of the diplomatic relations of the United States and the related development of its foreign policy from 1789 to 1900. Prerequisite: Hist 110 or 120.

382 — Twentieth Century Diplomacy **3 hrs. cr.**

A historical investigation of the activity of the United States and the world of our time. The course emphasizes the increasing importance of the United States in World Affairs since it became a world power. Prerequisite: Hist 110 or 120.

401, 402 — Independent Study **1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.

411 — European Intellectual History **3 hrs. cr.**

A study of the intellectual, cultural and social occurrences in Europe from the Italian Renaissance to the French Revolution. Emphasis is placed on the Age of Enlightenment. Prerequisite: Hist 200, 201 or 202.

412 — European Intellectual History **3 hrs. cr.**

A continuation of History 411. Attention is given to the significant effects of the French Revolution, Nationalism, Socialism and mass warfare upon European civilization in the 19th and 20th centuries. Prerequisite: Hist 200, 201 or 202.

431 — The Renaissance and the Reformation 1300—1650 **3 hrs. cr.**

A study of the political, economic, religious and social development of Europe from the Crusades through the Reformation. The course reviews early European society and institutions and traces the replacements of these by the modern state system and capitalism and the reformation of the Church. Prerequisite: Hist 200, 201 or 202.

451 — The United States 1870—1920 **3 hrs. cr.**

A study of the United States at the turn of the century. The im-

COURSES OF INSTRUCTION

pact of the industrial revolution and its effect on social, political and economic institutions, the Progressive Movement and World War I. Prerequisite: Hist 110 or 120.

452 — The United States Since 1920 3 hrs. cr.

A detailed study of the impact of the great industrial development of the United States upon its history during the five decades since 1920, the roaring twenties, the turbulent thirties as well as the fitful fifties and sixties. Prerequisite: Hist 110 or 120.

461 — English Constitutional History 3 hrs. cr.

The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crises of the twentieth century.

462 — United States Constitutional History 3 hrs. cr.

A study of the growth and development of the United States Constitution from 1787 to the present. Prerequisite: Hist 110 or 120.

481 — History of China 3 hrs. cr.

A survey of modern China. Special emphasis is placed on Chinese society, political developments and relations with the west in the 19th and 20th centuries. Prerequisites: Hist 200, 201 or 202.

482 — History of Japan 3 hrs. cr.

A survey of modern Japan. The course traces Japan's history from the middle of the 19th century to the present. Special attention is given to the development of Japan and the world reaction to it as it came into contact with western culture. Prerequisite: Hist 200, 201 or 202.

491 — The Era of the French Revolution and Napoleon 3 hrs. cr.

A study of Europe during the period of revolution and reaction 1789-1815. Emphasis is placed on the French Revolution, the rise and fall of Napoleon and their manifestations for the future. Prerequisite: Hist 200, 201 or 202.

JOURNALISM

Division of Arts and Sciences

Department of Language and Literature

The journalism program provides training for the student desiring to work in the communications media, for the education

JOURNALISM

major who will advise newspaper and yearbook staffs, and for the student who plans to transfer to a school of journalism. While pursuing a bachelor's degree at Missouri Southern, a student may accumulate 25 hours in journalism. The education major can qualify for state certification. The student headed for a journalism school can test his interest in a career in this field by enrolling in a course or two and by working on the college newspaper, **The Chart**.

To receive the Bachelor of Arts degree with a major in English and a minor in journalism, the student must complete the English major requirements and 21 hours in the supportive area of journalism, as approved by the Division Chairman.

To receive the Bachelor of Science in Education degree with a major in English and certification in journalism, the student must complete the requirements for a major in English and accumulate 15 hours in the supportive area of journalism, as approved by the Division Chairman.

Students expecting admission to a school of journalism their junior year should follow the schedule recommended for the freshman and sophomore years of candidates for a Bachelor of Science in Education degree with a major in English. They must have 13 hours in one foreign language and principles of economics.

111 — News Writing

3 hrs. cr.

A study of news of some complexity ; editing, copy reading, and proofreading. Practical work on the college newspaper, **The Chart**. Prerequisite: Consent of instructor.

121 — Mass Communications

2 hrs. cr.

A study of the history and development of the mass communications industry and its role in the political, social, and economic life of the present. Brief study of the professional requirements and vocational opportunities in the field of journalism.

220 — Practical Journalism

(per sem.) 1 hr. cr.

Application of journalistic principles to the college newspaper. One hour of credit each term for a maximum of three terms. Prerequisite: Jour 111 or consent of instructor.

231 — Feature Writing

3 hrs. cr.

Advanced course in writing special articles for newspapers and magazines. Practical work on college publications. Prerequisite: Jour 111 or consent of instructor.

232 — Editing and Editorial Writing

3 hrs. cr.

Principles of copy reading and editing. An analysis of editorials appearing in responsible publications and the writing of editorials of some maturity.

COURSES OF INSTRUCTION

241 — Radio and Television News Writing	3 hrs. cr.
Techniques of preparing radio and television newscasts, including reporting, writing, editing, and illustrating newscasts.	
Prerequisite: Jour 111, Speech 102.	
302 — Photo-Journalism	3 hrs. cr.
Theory and practice of photo-journalism. Study of technical and communications aspects of photography and their application to news media. Prerequisite: Jour 111.	
312 — Publication Principles	2 hrs. cr.
Editorial and production practices of trade journals and publications of church, school, and business. Special emphasis on high school newspapers and yearbooks.	
320 — Advertising	3 hrs. cr.
(See Business, Mktg 401)	

LAW ENFORCEMENT

Division of Technology

Dix, Seneker

The Associate of Science degree in Law Enforcement prepares students for entrance into police work, a field which has become highly specialized and complex at the local, state and national levels. Modern law enforcement responsibilities make academic preparation beyond the high school level essential.

Many law enforcement agencies have specific requirements regarding minimum age, height, weight, vision, and other related requisites. Students interested in this field should check with appropriate agencies regarding their requirements.

The Associate of Science in Law Enforcement degree requires the completion of the general education courses (see page 61) plus the following: P Sc 210, Soc 110, Soc 212, Soc 322, Soc 412, Psy 221, HPER 212, L E 100, L E 110, L E 150, L E 190, L E 200, L E 210, L E 250, L E 290. Electives should be selected, with advisor approval, from the fields of literature or science.

100 — Introduction to Law Enforcement	3 hrs. cr.
Municipal, county, state, and federal police organizations. History and administration of justice. Responsibilities and opportunities in the field of law enforcement.	

110 — Police Organization and Administration	2 hrs. cr.
Management operations, communications, budgeting, recruiting, training, and public relations as they pertain to the local and state law enforcement agencies.	

MACHINE TECHNOLOGY

150 — Interview and Report Writing 2 hrs. cr.

The techniques of interviewing and writing the report. The collection, recording, and preservation of evidence. How to preserve continuity in report writing. Law enforcement forms.

190 — Supervised Police Work 6 hrs. cr.

The student spends a specific amount of time in the local police department, the local sheriff's department, and with the highway patrol learning the standard line activities. The purpose is to introduce the student to the actual duties of law enforcement officers.

200 — Criminal Investigations 3 hrs. cr.

Fundamentals of criminal investigations including theory and history. Techniques appropriate to the specific type of crime are emphasized.

210 — Criminal Procedures 3 hrs. cr.

Types of criminal evidence for police; criminal procedures in various courts; arrest, search, seizure, collections of evidence, and related topics.

250 — Criminal Law 3 hrs. cr.

Criminal law purposes and functions; laws concerning arrest, search, and seizure. Rights and duties of officers and citizens in relation to local, state, and federal laws. The development, application, and enforcement of laws.

290 — Police Supervision and Management 3 hrs. cr.

Principles of personnel management as applied to law enforcement agencies; evaluation, promotion, discipline, training, employer welfare, and problem-solving leadership.

MACHINE TECHNOLOGY

Division of Technology

Whitworth

Missouri Southern State College offers an Associate of Science Degree in Machine Technology. The specialized course work in this curriculum is designed to prepare students for employment in the metal working industries. General education courses provide for growth as an individual and for constructive living in the family and nation.

The curriculum is college oriented. Students following this curriculum are regular members of the college student body and are expected and encouraged to participate in extracurricular activities.

COURSES OF INSTRUCTION

The Associate of Science in Machine Technology requires the completion of the general education courses (see page 61 plus the following: Draf 101, Draf 130, Mach 100, Mach 110, Mach 150, Mach 160, Mach 210, Mach 220, Mach 230, Mach 250, Mach 260.

100 — Introduction to Machine Tool Processes 5 hrs. cr.

An introductory course covering the operation, safety, set-up, and theory of the six basic machine tools — the lathe, drill press, milling machine, grinders, shaper, and power saws — and the basic theory and operation of heat treatment and inspection equipment. Two one-hour lectures; three three-hour laboratories per week.

110 — Advanced Machine Tool Processes 5 hrs. cr.

The study and use of attachments and accessories for basic machine tools and the introduction of production machines: screw machines, turret lathe, tracer lathes, gear hob, electrical discharge machines, and chemical milling. Two one-hour lectures; three three-hour laboratories per week. Prerequisite: Mach 100.

150 — Technical Mathematics 3 hrs. cr.

The introduction and application of the basic concepts of math, geometry, and trigonometry to machine tool processes.

160 — Process Instrumentation 3 hrs. cr.

Teaches quality control, inspection and precision measurement procedures. Utilizes air and electronic gauging systems, optical measurement and related math. One one-hour lecture; two two-hour laboratories per week.

210 — Fundamentals of Cutting Tools 5 hrs. cr.

Introduction to tool geometry, chip formation, and effects of coolants and tool design on tool life. Instruction on the sharpening of standard cutting tools for drilling and on the applications of various factors on machinability. The use of carbides and ceramics as cutting tools. Two one-hour lectures; three two-hour laboratories per week. Prerequisite: Mach 110.

220 — Tool and Die Production 3 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production tools and dies. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

230 — Jig and Fixture Production 3 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production jigs and fixtures. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110 and Draf 110.

MARKETING AND MANAGEMENT

250 — Numerical Control in Machining 3 hrs. cr.

The introduction to point-to-point and continuous path numerical control, part programming, operation of numerical control systems, and justification and maintenance of numerical control systems. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach 110, Mach 150, and Draf 110.

260 — Fundamentals of Metallurgy 3 hrs. cr.

Introduction to ferrous and non-ferrous metallurgy. Studies the physical properties of the various alloys, heat treatment of them, chemical properties of metals, applications of the various metals, machinability, tensile strength and hardness testing, and study of the grain structure of the various alloys. Two one-hour lectures, one two-hour laboratory per week.

MARKETING AND MANAGEMENT

Division of Business Administration

Finke, Gray, Larimore, Leon, Miller, Tiede

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Marketing and Management approach. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 158.

300 — Principles of Marketing 3 hrs. cr.

A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing cost are treated from the standpoint of consumers, middlemen, and manufacturers. Prerequisite: Econ 201 and 202.

312 — Retailing 3 hrs. cr.

Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: MM 300.

350 — Business Organization and Management 3 hrs. cr.

A course in business organization and management with application of concepts and techniques to specific, realistic case situations. Prerequisite: GB 101.

COURSES OF INSTRUCTION

352 — Personnel Management **3 hrs. cr.**

A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: MM 350 or consent of instructor.

401 — Advertising **3 hrs. cr.**

Description of fundamental advertising principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: MM 300.

412 — Marketing Management **3 hrs. cr.**

Managerial aspects of marketing; problems involved in investigations of markets, planning the sales effort, management of sales and service personnel, and control of sales operations. Prerequisite: MM 350 and MM 300.

431 — Production Management **3 hrs. cr.**

Principles and decision analysis related to the effective utilization of the factors of production in manufacturing activities for both intermittent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations. Prerequisite: MM 350.

452 — Business Policy **3 hrs. cr.**

An integrating course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisite: MM 350.

470 — Marketing Research **3 hrs. cr.**

A course involving the systematic gathering, recording, and analyzing of data relating to (1) market analysis, (2) sales analysis, (3) consumer research, and (4) advertising research. Prerequisite: GB 321 and 6 hrs. of Marketing.

481 — Seminar in Marketing and Management **1-3 hrs. cr.**

A seminar for upper division marketing and management or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

482 — Independent Study in Marketing and Management **1-3 hrs. cr.**

Individually directed readings, research, and discussions in selected areas of marketing and management for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: GPA of 3.0 in major field and permission.

MATHEMATICS

MATHEMATICS

Division of Arts and Sciences

Allen, Boehning, Jensen, Jolly, Livingston,
Roubidoux, Subramanian

A major for the Bachelor of Science degree consists of 36 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, plus 18 upper division hours in mathematics. In addition, 18 hours in physical sciences (excluding Chem 100 and Phys 100) are required.

A major for the Bachelor of Science in Education with mathematics as one teaching field (Plan B) consists of a total of 30 semester hours in mathematics. The required courses are: Math 150, Math 250, Math 260, Math 300, and 12 upper division hours in mathematics. In addition, 10 hours in the physical sciences are required.

A major for the Bachelor of Science in Education degree with mathematics as one of two teaching fields (Plan A) consists of 27 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, and 9 upper division hours in mathematics. See page 86 for teacher education requirements.

20 — Beginning Algebra **2 hrs. cr.**

A beginning algebra course with a review of basic arithmetic and practical applications.

30 — Intermediate Algebra **3 hrs. cr.**

A course in intermediate algebra for students deficient in algebra. NOTE: No credit in Math 20 or Math 30 will count toward the requirements for a baccalaureate degree.

100 — Slide Rule **1 hr. cr.**

A laboratory course in the use of a log-log rule. Meets two hours a week. Prerequisite: Trigonometry or concurrent enrollment in Math 112 or 140.

110 — Introduction to College Mathematics I **3 hrs. cr.**

Basic college mathematics with an introduction to sets and the logic of algebra. This course satisfies the requirement in mathematics for general education. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 20 with grade of C.

112 — Trigonometry **2 hrs. cr.**

Study of trigonometric functions. Prerequisite: One and one half units of high school algebra, one unit high school geometry or permission of the instructor, and satisfactory score on the Mathematics Placement Test.

COURSES OF INSTRUCTION

120 — Introduction to College Mathematics II 3 hrs. cr.

A continuation of Math 110. Sets of points, systems of numeration, metric geometry, modular systems, relations and functions, probability. Recommended for prospective elementary teachers. Prerequisite: Math 110.

130 — College Algebra 3 hrs. cr.

A course for students not majoring in the fields of math, science or engineering. Prerequisite: Two and one half units in high school math including geometry and a satisfactory score on the Mathematics Placement Test, or Math 30 with a grade of C.

140 — Algebra and Trigonometry 5 hrs. cr.

This course is the equivalent of Math 112 and Math 130. Prerequisite: Three years of high school mathematics and satisfactory score on Mathematics Placement Test or Math 30 with a grade of C.

150 — Calculus with Analytic Geometry I 5 hrs. cr.

Differentiation and integration of algebraic and trigonometric functions, and plane analytic geometry using vectors. Prerequisite: Math 140 with a grade of C, or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

152 — Introduction to Programming 2 hrs. cr.

A study of digital computer systems, programming of a digital computer and the solution of problems. Prerequisite: Math 150.

250 — Calculus with Analytic Geometry II 5 hrs. cr.

Differentiation and integration of transcendental functions, polar coordinates, theory of limits, parametric equations. Applications to physical problems. Prerequisite: Math 150 with a grade of C.

260 — Calculus with Analytic Geometry III 5 hrs. cr.

Solid analytic geometry, infinite series, partial differentiation and multiple integrals. Prerequisite: Math 250 with a grade of C.

271 — Selected Topics in Mathematics 2 hrs. cr.

A course to enrich the student's knowledge and promote his interest in various areas of mathematics, especially in the area of modern mathematics. Recommended for all Math majors. Prerequisite: Math 150.

300 — Fundamentals of Mathematical Thought 3 hrs. cr.

An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, introduction to theory of groups, rings, integral domains, and fields. Prerequisite or corequisite: Math 260.

MATHEMATICS

312 — Problems of Teaching Arithmetic in the Elementary Schools 2 hrs. cr.

(See Education 312 for description.) Will not count toward a major in mathematics.

322 — Differential Equations 3 hrs. cr.

Standard types of ordinary differential equations of the first and second order, linear equations with constant coefficients and applications to geometry and physical science. Prerequisite: Math 260.

332 — Geometry 3 hrs. cr.

Concentrated Euclidian geometry theory from a modern axiomatic viewpoint. Includes an introduction to projective and differential geometry. Recommended for prospective secondary mathematics teachers. Prerequisite: Math 250.

342 — Abstract Algebra 3 hrs. cr.

Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields. Prerequisite: Math 300.

350 — Introduction to Numerical Analysis 4 hrs. cr.

(See Computer Science 250 for description.) One additional project is required for the mathematics credit.

351 — Linear Algebra 3 hrs. cr.

The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms, linear functionals, vector inner products and cross products. Prerequisite or corequisite: Math 300.

361 — Probability and Statistics 3 hrs. cr.

Introduction to theory of probability and statistics using concepts and methods of calculus. The binomial and Poisson probability measures. The central limit theorem. Prerequisite: Math 260.

412 — Vector Analysis 3 hrs. cr.

Vector spaces, linear transformations, determinants, eigenvalues and diagonalization of symmetric matrices, curl, divergence, gradient, multiple integrals, and the theorems of Green, Gauss, and Stokes. Prerequisite: Math 260.

421 — Advanced Calculus I 3 hrs. cr.

A rigorous review of elementary calculus: Real number systems, continuous functions, functions of several variables, implicit functions. Prerequisite or corequisite: Math 300.

422 — Advanced Calculus II 3 hrs. cr.

Coordinate transformations, vectors, multiple integrals, Green's theorem, theory of integration, differential equations, Fourier

COURSES OF INSTRUCTION

Series. Emphasis on theory rather than applications. Prerequisite: Math 421.

431 — Numerical Analysis

3 hrs. cr.

Digital computer programming, finite differences, numerical integration, matrix computation, numerical solution of non-linear differential equations. Solution of many problems on a digital computer. Prerequisite or corequisite: Math 322.

440 — Independent Study

1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.

490 — Seminar in Mathematics

1-3 hrs. cr.

A seminar for upper division majors only. The class meets regularly each week. Meeting times per week are equal to the number of credit hours determined by the department for a given semester. The course is designed to give both broad and specialized knowledge of the discipline. Prerequisite: Advanced standing in major field and consent of department head.

MUSIC

Arts and Sciences

Elliott, Harrell, Harris, D. Johnson, Sims, Taylor

The Department of Music offers courses leading to the degrees of Bachelor of Arts and Bachelor of Science in Education in either vocal or instrumental music. The Bachelor of Arts degree includes 38 hours of music. Required courses are Music 111-112, Music 131, Music 221-222, Music 351-352, Music 421, Music 431, Music Ensemble, and 12 semester hours of Applied Music. Supporting courses may include 9 hours of music.

The Bachelor of Science in Education degree with instrumental music as one teaching field (Plan B) includes 48 semester hours of music. Required courses are Music 111-112, Music 131, Music 181, Music 182, Music 221-222, Music 231, Music 232, Music 351-352, Music 361, Music 362, Music 371, Music 411, Music 431, Music 441, Large Instrumental Ensemble, and 12 semester hours of applied music. See page 91 for teacher education requirements.

The Bachelor of Science in Education degree with vocal music as one teaching field (Plan B) includes 47 semester hours of music. Required courses are Music 111-112, Music 131, Music 221-222, Music 181, Music 182, Music 421, Music 351-352, Music 441,

MUSIC

Music 371, Large Vocal Ensemble, and 12 semester hours of Applied Music. See page 91 for teacher education requirement.

All music education majors will successfully complete two semesters of Applied Piano. This requirement may be waived by the department head upon demonstration of proficiency.

The performing ensembles of the music department include the College Chorale, the College-Community Symphony Orchestra, the Concert Band, the Lab Band, the Vocal Ensemble, and the College-Community Choral Society. In addition to frequent performances by these groups, student recitals are held regularly.

The student must meet department requirements for recital attendance and recital appearance, including a senior recital or joint-recital.

All music majors must perform in a large ensemble during every semester of residency as follows: vocal major — Choir 121-122, Wind and Percussion major — Band 191-192, String major — Orchestra 151-152, Keyboard major — any large ensemble with permission of instructor.

Students wishing to be certified to teach in both secondary and elementary schools may do so by adding the following course: Music 371.

110 — Music Appreciation **3 hrs. cr.**

Designed to give the non-music major an insight into musical masterpieces from all eras of music literature. No credit for music majors.

111-112 — Music Theory **(per sem.) 3 hrs. cr.**

(111) Intensive study of basic materials of music developed through melodic, rhythmic, and harmonic dictation, sight-singing, keyboard and written harmony. Triads, their inversions and connections. For music majors. Others by consent of the instructor; (112) Includes seventh chords and their inversions and non-harmonic tones. Intensive work in ear-training and keyboard harmony. Prerequisite: Music 111. Five meetings per week.

121, 122 — Choir **(per sem.) 1 hr. cr.**

Open to all college students by audition only. Preparation and performance of great choral works. Prerequisite: Permission of the instructor.

131 — Introduction to Professional Music Education **1 hr. cr.**

A course designed to orient the student to the profession of music education.

141, 142 — Lab Band **1 hr. cr.**

A stage band open to all college students who are qualified instrumentalists. The Lab Band will prepare and present several

COURSES OF INSTRUCTION

concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: Permission of the instructor.

151, 152 — Orchestra 1 hr. cr.

Open to all college students who play an orchestral instrument. The orchestra will present five public concerts each year, performing standard orchestral literature. Prerequisite: Permission of the instructor.

161, 162 — Vocal Ensemble 1 hr. cr.

Small select ensemble from the membership of the college choir. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: Membership in choir.

171, 172 — Brass Choir 1 hr. cr.

Performance of literature for brass ensemble. Open to all qualified students. One meeting per week.

180 — Choral Society no credit

Open to all college students and area adults. The purpose of this course is to offer choral experiences for all college students and adults not eligible for the Chorale. Concerts will be scheduled throughout the year at the discretion of the conductor.

181 — Choral Conducting Techniques 1 hr. cr.

Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.

182 — Instrumental Conducting Techniques 1 hr. cr.

Technique of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organizations, program building, and public appearances. Laboratory work with the college Concert Band and Orchestra.

191, 192 — Concert Band (per sem.) 1 hr. cr.

Open to all college students who play a band instrument. Presents public concerts; functions as a "pep band" at school activities. Prerequisite: Permission of instructor.

221-222 — Music Theory (per sem.) 3 hrs. cr.

(221) Altered chords and modulation. Advanced work in ear-training and keyboard harmony. Introduction to contemporary techniques and composition in simple forms; (222) Modal harmony. Advanced part-writing procedures. Emphasis on keyboard harmony. Prerequisite: Mus 112. Five meetings per week.

262 — Music for the Elementary School 3 hrs. cr.

Emphasis on methods of teaching music in the elementary classroom and a study of materials to be used.

MUSIC**342 — Methods of Teaching Secondary School Music 2 hrs. cr.**

Methods and materials used in teaching instrumental and choral music in junior high and high school. (See Educ 392)

351, 352 — History of Music (per sem.) 3 hrs. cr.

(351) General survey of history of music from Greek period to 18th century; (352) From 18th century to the present. Score reading required.

371 — Music in the Public School 3 hrs. cr.

A course designed to acquaint the music education major with the problems of the administration and supervision of the school music program through the high school level. The content includes the place of music in the school program, music equipment, schedules, budget, instructional problems, and public relations in music.

411 — Marching Band Techniques 1 hr. cr.

Procedures used in organizing, promoting, drilling, transporting, uniforming, and sustaining a high school marching band. Deals with problems in charting a half time show and the coordinating of suitable music.

421 — Form and Analysis 3 hrs. cr.

Harmonic and form analysis of compositions from classic era, formal analysis of compositions from pre-classic era, and introduction to contemporary principles. Prerequisite: Music 222.

431 — Orchestration 2 hrs. cr.

Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Music 222.

441 — Advanced Conducting Techniques 2 hrs. cr.

A laboratory course in advanced problems of instrumental and choral conducting. Supervised conducting experience is provided. Prerequisites: Music 181, Music 182.

Instrumental Techniques 2 hrs. cr.**231 String Techniques**

Class instruction in the orchestral and band instruments, including a study of methods and materials to be used in the teaching of a beginning student. Given on a laboratory basis with four recitations a week.

232 Brass Techniques**361 Percussion Techniques****362 Woodwind Techniques**

COURSES OF INSTRUCTION

101 to 408 — Applied Music

1-2 hrs. cr.

101
102
203
204
305
306
407
408

Private instruction in piano, organ, voice, trumpet, trombone, French horn, violin, viola, cello, double bass, flute, clarinet, oboe, saxophone, bassoon, and percussion. Credit variable. One hour lessons per week in major. Jury examination required. Lessons by arrangement with approved instructors.

NURSING

Division of Technology

Elgin, Ketchum, Legg, Logue, Wood

Missouri Southern State College offers a nursing program leading to an Associate of Science Degree. Upon completion of the program the graduate is eligible to write the State Board Test Pool Examination to qualify for license as a Registered Nurse (R.N.). This program is accredited by the Missouri State Board of Nursing.

The nursing program is designed to prepare a graduate to give patient centered care in beginning general staff nurse positions. This program provides for the development of knowledge, skills, and attitudes expected of a registered nurse in general nursing practice through liberal arts, science, and specialty courses.

The Associate degree Nursing Program is designed to fulfill the educational needs of qualified high school graduates who want to study in a multi-purpose collegiate institution where they share the responsibilities, privileges, and intellectual and social experiences with all other students.

Applicants whose background in the Biological Sciences is deficient will be required to successfully complete a course in General Zoology, or the equivalent.

Applicants whose mathematic background is deficient (determined by the Mathematics Placement Test) will be required to successfully complete a course in Mathematics (Math 20-30 or the equivalent). The above requirements must be met before being considered for admission to the nursing curriculum.

The Associate of Science in Nursing degree consists of a minimum of 72 semester hours. The required courses include Nursing 100, Nursing 120, Nursing 130, Nursing 210, Nursing 240, Bio

NURSING

221, Eng 101 and 102, Soc 110, HPER 101 and 102, Chem 100, Psy 100, Bio 231, PSc 120, and Speech 100.

100 — Fundamentals of Nursing **5 hrs. cr.**

The study of principles and techniques fundamental to the practice of nursing. The course content focuses on basic physical, emotional, and cultural needs of people and their inter-relationships in health problems. The planned laboratory experiences are developed to assist the student in planning, providing, and evaluating patient-centered care. Principles and concepts of family development, mental health, nutrition, and pharmacology are correlated with nursing content. A review of the history of nursing is included. Three hours lecture; eight hours of clinical laboratory.

120 — Nursing in Physical Illness I **8 hrs. cr.**

This course is planned for the study of the adult person whose care requires medical and/or surgical intervention. Continued use of the problem-solving approach in more complex nursing situations enables the student to apply new and previously acquired knowledge and skills. Principles and concepts of rehabilitation, diet therapy, and pharmacology, are correlated. A study of physical, mental and developmental concepts of the adult through senescence is included. Pre and post conferences are planned with the supervised clinical experience. Four hours lecture; twelve hours clinical laboratory. Prerequisite: Nursing 100 with minimum grade of C.

130 — Nursing in Mental Illness **4 hrs. cr.**

Course is designed to assist the student to gain increased knowledge of mental health concepts. A student is given the opportunity to gain increased knowledge and skill in communications. Laboratory experiences are planned to help the student gain an understanding of the effect of mental illness on normal adult development and application of nursing principles to the care of the mentally ill adult. Four hours lecture; twelve hours of clinical laboratory. Prerequisite: Nursing 120 with minimum grade of C.

210 — Maternal and Child Health **10 hrs. cr.**

Family centered course with emphasis on the nursing care of mothers during the maternity cycle. Normal growth and developmental and mental health concepts during this period of the life cycle are included. Emphasis is on individualized care in health and disease. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 130, with minimum grade of C.

COURSES OF INSTRUCTION

240 — Nursing in Physical Illness II 10 hrs. cr.

Continuation of Nursing 120. Intended to help the student to further develop knowledge and skills necessary to provide individualized nursing care of the adult patient. Study of major health problems is continued with consideration of prevention, diagnosis, treatment, rehabilitation, and nursing care. Consideration is given to psychological, cultural, socio-economic, and developmental factors which may cause, complicate or affect the patient's treatment. Includes preparation for responsibilities and opportunities as a graduate nurse. Pre and post conferences are planned with the supervised clinical experience. Five hours lecture; fifteen hours of clinical laboratory. Prerequisite: Nursing 210, with minimum grade of C.

OFFICE ADMINISTRATION

Division of Business Administration

Compton, Cowan, Miner

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree and a Bachelor of Science in Business Education degree.

The requirements for the Technology Programs leading to Certificates of Achievement and Associate of Science degrees are found on page 158.

101 — Elementary Typewriting 3 hrs. cr.

The chief emphasis in this course is to learn to manipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and simple tabulation.

102 — Intermediate Typewriting 3 hrs. cr.

This is primarily a letter writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscript and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per minute for ten minutes with the 5-error limit. Prerequisite: OA 101 or a good knowledge of the keyboard.

111 — Elementary Shorthand 3 hrs. cr.

A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Typewriting

OFFICE ADMINISTRATION

should precede or parallel the course. Class meets five days per week.

120 — Intermediate Shorthand **3 hrs. cr.**

A dictation course in which the theory has been completed. It is a review of theory, and special attention will be given to developing efficient transcription procedures. Dictation will range from 60 to 100 words per minute. The minimum speed requirement by the end of the semester is to write at least 80 words per minute with 95 per cent accuracy. Prerequisite: OA 111 or any course in which the theory has been completed.

200 — Advanced Typewriting **3 hrs. cr.**

Production of mailable letters, manuscripts, reports, addressing envelopes, business forms and legal typing is emphasized. Minimum passing requirement is 60 words per minute for ten minutes with the 5 error limit. Prerequisite: OA 102 or the ability to type 40 words per minute and a knowledge of letter writing.

210 — Advanced Shorthand **3 hrs. cr.**

The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to 140 words per minute. The minimum requirement by the end of the semester is at least 100 words per minute with 95 per cent or more accuracy. Prerequisite: OA 120 or the ability to take dictation at 80 words per minute.

220 — Dictation and Transcription **3 hrs. cr.**

This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy.

230 — Secretarial Procedures **3 hrs. cr.**

Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instructions in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the Office Administration curriculum. Freshmen may be admitted by permission of the instructor.

330 — Methods of Teaching Business **2 hrs. cr.**

Special methods of instruction problems, and difficulties peculiar to the teaching of each business subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: At least one course in Education and one course in psychology. Two hours credit in Education (See Educ 330).

COURSES OF INSTRUCTION

PHILOSOPHY

Division of Arts and Sciences

Department of Language and Literature

A. Orr

201 — Introduction to Philosophy 3 hrs. Cr.

Comparative survey of major types of philosophy, and of representative problems in philosophy.

212 — Ethics 3 hrs. Cr.

Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.

HEALTH, PHYSICAL EDUCATION AND RECREATION

Division of Education and Psychology

Bogard, Calwhite, Davis, Frazier, Landrith, Lawson,

Shipley, Twenter, Wade, Wuch, Yount

Students who desire certification as a teacher of health, physical education, and recreation may choose to become qualified at either the secondary level or a combination of both elementary and secondary levels. Students planning to major in this field should refer to page 91 of this catalog where the Teacher Education Program is described. Students planning to teach at both elementary and secondary levels should select Plan B*. Those desiring to make physical education one of two teaching fields should prepare under Plan A*. The second teaching field must be selected from: art, biology, business education, chemistry, English, mathematics, physics, physical science, Spanish, or speech. The student will consult the specific department concerned for the requirements of the second teaching field.

Persons preparing to teach physical education in the public schools of Missouri may also be certified to teach health by completing: HPER 160, Bio 221, and HPER 370.

An area of concentration in **driver education** is offered in this department as a supporting area for those earning secondary level certification in any major area.

HEALTH—PHYSICAL EDUCATION

A certification program for interscholastic coaches is available for men who will be certified to teach at the secondary school level in any major area.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 46 semester hours. For men, the required courses are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 331, HPER 312, HPER 342, HPER 350, HPER 351, HPER 352 or 360, HPER 370, HPER 410, HPER 431, HPER 450, and HPER 470. (A course in child psychology (Psy 200) or human development (Psy 110) is required for teachers of elementary school physical education.)

For women, the required courses are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 312, HPER 321, HPER 322, HPER 332, HPER 342, HPER 370, HPER 410, HPER 431, HPER 450 or HPER 220, HPER 470. (A course in child psychology (Psy 200) or human development (Psy 110) is required for teachers of elementary school physical education.)

A major for the Bachelor of Science in Education degree with physical education as one of two teaching fields (Plan A) consists of 32 semester hours. For men the required courses are Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 342, HPER 431 or 470, and HPER 450. Select 6 hours from HPER 332, HPER 350, HPER 351, HPER 352, and HPER 360.

For women, the course requirements are: Bio 221, HPER 150, HPER 251, HPER 252, HPER 310, HPER 321, HPER 322, HPER 342, HPER 431 or 470, and HPER 450 or 220.

*Persons planning to major in Physical Education should go to the physical education office to secure a sheet detailing the course requirements for the curriculum.

150 — Introduction to Professional Physical Education

2 hrs. cr.

A course designed to orient the student to the profession of physical education.

160 — Personal Health

2 hrs. cr.

Study of health problems of the individual, body, mechanics, nutrition, drugs and drug abuse, sex hygiene, mental hygiene, and the cause and prevention of common diseases. Not recommended for elementary education majors.

251, 252 — Fundamentals of Physical Education Activities I (per sem.)

4 hrs. cr.

Study of the skills and understandings of selected activities: games, sports and rhythms commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness taught

COURSES OF INSTRUCTION

by a team composed of members of both the men's and women's physical education departments. Meets for two periods daily. (Either HPER 251 or 252 may be replaced with 5 semester hours of different activity courses, with permission of department head.) Enrollment restricted to H. P. E. majors.

310 — The Elementary School Physical Education Program 3 hrs. cr.

A course designed to familiarize the student with the procedures and techniques for planning the curriculum for elementary school physical education. (P.E. majors only.)

311 — Physical Education for the Elementary School 2 hrs. cr.

Study of the methods and materials needed in directing the activity program of games, skills, rhythm, and stunts for the elementary school child. Designed for men and women who are candidates for the elementary level teaching certificates.

312 — Teaching Elementary School Physical Education 2 hrs. cr.

Analysis of basic movement patterns, basic skills, rhythmic and game activities with detailed explanations of presentation to the elementary school child. Prerequisites: HPER 310 (P.E. majors only.)

321 — Theory and Analysis of Selected Team Sports 3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of vidual sports. Women only. Prerequisite: HPER 150 and 252.

322 — Theory and Analysis of Selected Individual Sports 3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports. Field and play days are covered. Women only. Pre- requisite: HPER 252.

331 — Theory and Analysis of Selected Team Sports 2 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing, officiating, and performing of team sports. Men only. Prerequisite: HPER 252.

332 — Rhythmic Form and Analysis 2 hrs. cr.

Analysis of dance forms showing how complex music and dance forms are involved. Prerequisite: Activity course in dance.

340 — Organization of Adapted Physical Education 3 hrs. cr.

Study of the means used to provide a physical education program to fit the needs of the physically and mentally handicapped. Prerequisite: HPER 310 and 311.

HEALTH-PHYSICAL EDUCATION

342 — Mechanical and Kinesiological Approach to Movement

3 hrs. cr.

A mechanical and kinesiological approach to the movement of average and exceptional individuals in various activities. Prerequisite: Bio 221 or equivalent and HPER 252.

350 — Theory of Basketball

2 hrs. cr.

Organization and management of the secondary school basketball program. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season. Prerequisite: HPER 252.

351 — Theory of Football

2 hrs. cr.

Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment. Prerequisite: HPER 252.

352 — Theory of Track and Spring Sports

2 hrs. cr.

Organization and administration of meets, coaching, physical conditioning and training for each event including track and field programs. Golf, tennis, and other spring interscholastic sports are also included. Prerequisite: HPER 252.

360 — Theory of Baseball

2 hrs. cr.

Organization and management of a school baseball program to individual techniques, team play and problems in coaching of baseball. Prerequisite: HPER 252.

370 — School and Community Health Education

3 hrs. cr.

Study of the content, facilities, and equipment needed for teaching school and community health. The course is concerned with the health of the individual and of groups. Should be taken by all elementary education majors in place of HPER 160. Separate sections are usually taught for elementary majors. Prerequisite: 5 hrs. Biology.

410 — Principles and Philosophy of Physical Education

3 hrs. cr.

A study of the changing role of physical education as indicated by its historical past and as evidenced through the influence of the various philosophies. Prerequisite: HPER 150 and 252.

431—Supervision of Interscholastic Programs

3 hrs. cr.

Study of the organization and management of athletic programs in schools, staff functions, student leadership, facilities, equipment, health and legal aspects. Rules and regulations of interscholastic activities and techniques of officiating are studied. Officiating laboratory work is required. Prerequisite: HPER 150 and 252.

COURSES OF INSTRUCTION

450 — Prevention and Care of Injuries 3 hrs. cr.

Laboratory experiences in the care and prevention of athletic injuries. Includes first aid training. Prerequisite: Bio 221 and HPER 342. Enrollment limited to physical education majors.

470—Administration of Physical Education 3 hrs. cr.

Organizations and management of health and physical education in schools, scheduling, personnel, curriculum, finance, equipment and facilities. The intramural program will be studied in detail. Prerequisite: 20 hr. HPER.

480 — Seminar in Health or Physical Education 1-3 hrs. cr.

A thorough study of an advanced problem in health or physical education for selected students. Prerequisite: Senior standing, permission of department head.

490 — Independent Study 1-3 hrs. cr.

Research of a problem or field study relating to physical education; material, content, credit and schedule to be arranged by the department head. Prerequisite: Senior standing, 3.0 grade point average in major, and permission of department head.

DRIVER EDUCATION

To meet the Missouri teacher certification requirements as a driver education instructor the following courses are required: HPER 220, HPER 230, HPER 361, HPER 362, and AUTO 150. Also required are at least 2 hours selected from the following: PSY 210, PSY 221, EDUC 370, and EDUC 420. Driver education may be selected as a minor area for any person planning to teach at the secondary level under Plan B. Persons under Plan A can obtain certification for driver education also, but this certification must be in addition to their other two teaching fields.

220 — First Aid 2 hrs. cr.

Designed to complete the standard course of the American Red Cross in First Aid.

230 — Safety 2 hrs. cr.

A course aimed at developing concepts which are basic to safety education and for preparing the student to assume responsibility for accident prevention in the school, home, and community.

361 — Introduction to Driver Education 3 hrs. cr.

The first of two courses designed to prepare teachers of driver education for secondary schools. The place of the motor vehicle in American life; traffic safety; instructional materials and recommended methods of presenting such materials in the classroom and in the car on the road; laboratory work with beginning drivers. Prerequisites: PSY 210. Students must have: (1) a valid driver's license and (2) a safe driving record.

HEALTH-PHYSICAL EDUCATION

362 — Advanced Driver and Traffic Safety 3 hrs. cr.

A continuation of 361 with special attention given to administration, organization, finance, adult education, research, and evaluation of the school driver education program. Traffic safety problems at the local, state and national levels are also considered. Laboratory required. Prerequisite: HPER 361.

RECREATION

390 — Introduction to Recreation 3 hrs. cr.

A study of the recreation movement in America with a special insight into the development of community recreation departments and programs.

391 — Recreational Leadership 3 hrs. cr.

A study of the qualities which make for effective leadership and a look at the role of the recreation leader. Prerequisite: HPER 390.

COACHING CERTIFICATE*

The coaching certificate has been established to provide an opportunity for students other than physical education majors to become certified coaches in the State of Missouri. To earn the certificate the student should have a background in athletics and complete a total of 15 semester hours plus any prerequisite. The required courses are as follows: HPER 220, HPER 331, HPER 342. Select 6 hrs. from: HPER 350, HPER 351, HPER 352, HPER 360.

*This certificate does not permit the individual to teach physical education.

THE ACTIVITY PROGRAM IN PHYSICAL EDUCATION

The activity program in physical education has two basic objectives. It has the purpose of offering a program that will provide the student with the opportunity to develop a degree of skill sufficient to create interest and participation in this activity during leisure time in the adult years. A second important purpose is to provide the student with the necessary knowledge of philosophical, psychological, physiological and sociological nature of physical activity to comprehend the necessity of continued physical health throughout his lifetime.

To insure exposure to the various recreational activities, the College has adopted the following requirements:

All freshmen women and men (except physical education majors) should enroll in HPER 101 during the first semester and HPER 102 during the second semester. Students are required to complete two additional activity courses of their choice or to complete HPER 160. All persons planning to teach in the elementary schools of Missouri must complete either HPER 160 or HPER 370.

COURSES OF INSTRUCTION

Physical Education majors will be required to enroll in HPER 150 during their freshman year and HPER 251 and HPER 252 during their sophomore year. Varsity athletes should also enroll in the sport of their choice which will replace any activity course requirement except HPER 101 and 102.

A uniform prescribed by the division is to be furnished by each student and is a course requirement.

ACTIVITY COURSES

Course No.		Hrs. Cr.
100C	Individual Physical Education (Therapeutic)	2
101M	Introduction to Physical Activities I	1
101W	Introduction to Physical Activities I	1
102M	Introduction to Physical Activities II	1
102W	Introduction to Physical Activities II	1
161M	Varsity Football	1
162M	Varsity Basketball	1
171M	Varsity Cross Country	1
172M	Varsity Track and Field	1
180M	Varsity Golf	1
182M	Varsity Baseball	1
192M	Varsity Tennis	1
201W	Bowling and Field Hockey	1
210C	Golf and Badminton	1
215M	Bowling and Flag Football	1
222C	Varsity Sports and Activities	1
231C	Elementary Gymnastics and Tumbling	1
232C	Intermediate Gymnastics	1
240C	Fencing and Archery	1
241M	Soccer, or Speedball and Basketball	1
242M	Wrestling or Boxing and Softball	1
250C	Social Dance	1
261C	Elementary Swimming	1
262C	Intermediate Swimming	1
270C	Advanced Swimming (Senior Life Saving)	1
272C	Intermediate Folk Dance	1
280C	Water Safety Instruction (Prereq. HPER 270)	1
281C	Elementary Modern Dance	1
282C	Intermediate Modern Dance	1
290C	Recreational Activities	1
292C	Track, Weight Training	1

Unless otherwise noted, courses listed above have separate sections for women and men. The letters M, W, and C will be added to the course number of the schedule to indicate the designated sections. M indicates the course is for men only. W indicates the course is for women only. C indicates the course is coed.

PHYSICS

Division of Arts and Sciences

Phillips, Sloan, Strobel

A major for the Bachelor of Science degree consists of 35 semester hours in physics plus 18 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 341, Phys 372, Phys 381, Phys 401, Phys 452, Math 150, Math 250, Math 260 and Math 322. The following courses are recommended but not required: Phys 480, Phys 492, Math 152, Math 412, Math 431, Chem 101 and Chem 102.

A major for the Bachelor of Science in Education degree with physics as a single teaching field (Plan B) consists of 24 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 381, Math 150, Math 250 and Math 260. Four upper division additional elective hours in physics are also required. The following courses are recommended but not required: Chem 101, Chem 102 and Geol 110.

A major for the Bachelor of Science in Education degree with physics as one of two teaching fields (Plan A) consists of 20 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys 250, Phys 260, Phys 301, Phys 322, Phys 381, Math 150, Math 250 and Math 260. The following courses are recommended but not required: Chem 101, Chem 102, Phys 372 and Geol 110.

Physical Science

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 20 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys 250, Phys 260, Phys 301, Phys 381, Chem 101, Chem 102, Chem 162, Chem 201, Chem 301, Geol 110, plus 3 hours of upper division electives in physics. See page 91 for teacher education requirements.

100 — Fundamentals of Physical Science 5 hrs. cr.

Basic concepts in the fields of physics, chemistry, geology, and astronomy. Emphasis on such environmental topics as energy reserves, chemical and thermal pollution, transportation nets, fossil and nuclear power generation, and population. Lecture and demonstration periods. Prerequisite: Math 30 with a minimum grade of C or qualified for Math 110 on the MMPT.

151 — Elementary College Physics I 5 hrs. cr.

Study of mechanics, properties of matter, heat, wave motion and sound. Four hours of lecture and one two-hour laboratory per week. Prerequisites: Math 140 or Math 130 and permission of the instructor.

COURSES OF INSTRUCTION

152 — Elementary College Physics II 3 hrs. cr.

Study of electricity, magnetism, light and topics from modern physics. Two hours of lecture and one two-hour laboratory per week. Prerequisite: Phys 151.

250 — General Physics I 5 hrs. cr.

Includes the study of mechanics, properties of matter, heat, wave motion and sound. The conservation laws of physics are emphasized. Four hours of lecture and one three-hour laboratory per week. Corequisite: Math 150.

260 — General Physics II 5 hrs. cr.

A study of electricity, magnetism, and light, with introductions to quantum properties of radiation and matter. Four hours of lecture and one three-hour laboratory per week. Prerequisite: Phys 250. Corequisite: Math 250.

301 — Modern Physics 4 hrs. cr.

Wave motion, special theory of relativity, wave-particle experiments, introductory quantum mechanics, and nuclear physics. Prerequisite: Physics 260. Corequisite: Math 260.

322 — Classical Mechanics 3 hrs. cr.

Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy, gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisite: Phys 260. Corequisite: Math 322 or permission of instructor.

341 — Thermal Physics 4 hrs. cr.

Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, kinetic theory, and statistical mechanics. Four hours of lecture per week. Prerequisites: Math 260 and Phys 260.

372 — Electronic Circuits 4 hrs. cr.

Circuit analysis, resonance, tube and transistor characteristics, power supplies, amplifiers, and oscillators. Two three-hour lecture and lab per week. Presently limited to 15 students by equipment considerations. Prerequisite: Phys 260. Corequisite: Math 260.

381 — Intermediate Physics Laboratory 3 hrs. cr.

Experiments in mechanics, including mechanical wave phenomena, heat transfer, thermodynamic measurements, electrical measurements, precision calibration of electrical instruments, and geometrical and physical optics. Two three-hour laboratories per week. Prerequisite: Phys 301 or permission of instructor.

POLITICAL SCIENCE

401 — Electricity and Magnetism 4 hrs. cr.

Includes study of electrostatic forces, electric fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, electric circuits, Maxwell's equations, and electromagnetic waves. Four hours of lecture per week. Prerequisites: Math 260 and Phys 260.

452 — Quantum Mechanics 3 hrs. cr.

Time independent Schroedinger equation, eigenfunctions, expectation values, differential operators, perturbation theory, multi-electron atoms, and applications to solid state physics. Three hours of lecture per week. Prerequisite: Phys 301 and Math 322.

480 — Selected Topics in Physics 3 hrs. cr.

Student may select one or more of the following topics for further study: Modern Physics, Nuclear Physics, Solid State Physics, Optics, or Advanced Mechanics.

492 — Physics Seminar 1 hr. cr.

each time elected

Topics of current interest selected by the student from the areas of nuclear, solid state, astrophysics, or high energy physics. The course will also include several visits to nearby universities to attend colloquiums. Open to students having a minimum of 18 hours of physics and permission of the instructor.

POLITICAL SCIENCE

Division of Arts and Sciences

Evans, Spradling, St. Clair, Youst

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A political science major for this degree consists of 30 semester hours in Political Science. The student will select these courses in consultation with his adviser.

A political science minor consists of 20 semester hours in Political Science. For the minor the student will also select these courses in consultation with his adviser.

A social science major for the Bachelor of Science in Education degree, with an emphasis in Political Science (Plan B) consists of 47 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, 6 hours of upper division History courses, 3 hours of European and 3 hours of American, P Sc 120 and P Sc 210. For the remaining 23 hours the student will take Econ 201, 3 hours in Geography, 3 hours in Sociology and 14

COURSES OF INSTRUCTION

hours in upper division Political Science courses. See page for teacher requirements.

120 — United States Government 3 hrs. cr.

A study of the theories, objectives, problems, organization and functions of the United States Government and the Missouri State Constitution.

210 — State and Local Government 3 hrs. cr.

A study of general structure, problems and functions of state and local governments with emphasis on Missouri State Government.

231 — Introduction to Political Science 3 hrs. cr.

A study of the discipline of Political Science which deals with the foundation, organization, development and principles of political science.

301 — Political Parties and Elections 3 hrs. cr.

A study of the origins, structure, and functions of political parties; the dynamics of the two-party system and the role of third parties. It also analyzes the election process. Prerequisite: Political Science 120.

302 — Public Opinion and Pressure Groups 3 hrs. cr.

The study of the nature of pressure and interest groups and their role in the formulation of public opinion and governmental policy. Prerequisite: Political Science 120.

311 — The American Presidency 3 hrs. cr.

The politics of presidential selection, the powers of the President, the organization of the executive branch and its relations with other organs of government. Prerequisite: Political Science 120.

312 — The Legislative Process 3 hrs. cr.

An introduction to the legislative process; problems of representation, organization of the legislature, participation, and proposals for improved organization. Emphasis is placed on legislatures at the national level. Prerequisite: Political Science 120.

321 — International Relations 3 hrs. cr.

A study of the present-day relations and problems among the states of the world and the major factors which underline and influence these relations. Prerequisite: Political Science 120.

331 — Comparative Government 3 hrs. cr.

A study of the governments of selected European countries with special attention given to development of their political systems both in theory and practice. A comparison with American governmental institutions is emphasized. Prerequisite: Political Science 120 or 231.

POLITICAL SCIENCE

342 — Municipal Government 3 hrs. cr.

A study of the structure, legal status, functions and organization of municipal governments in America. Prerequisite: 6 hours in Political Science.

350 — Criminal Law 3 hrs. cr.

A study of the origins, development, application, and enforcement of criminal laws, their purposes and functions, and the rights and duties of public officials and citizens in relation to local, state and federal laws. The course is interdisciplinary in nature bringing together law enforcement students and political scientists in attempting to achieve a common understanding of crimes and punishment. The casebook method is used and students taking the course for upper level credit must complete additional research in the field of criminal law as required by the instructor. Prerequisite: Political Science 120 or 210.

411 — Political Theory 3 hrs. cr.

A survey of selected Western Political philosophies from early recorded history through the present time. Prerequisite; 6 hours in Political Science.

412 — Contemporary Political Thought 3 hrs. cr.

An examination of political ideas during the twentieth century. Prerequisite: 6 hours in Political Science.

421 — Public Administration 3 hrs. cr.

A study of the nature, scope, and development of the American administrative system, the theory of organization, staff and auxiliary agencies, the chief executive, administrative relationships, and science in administration. Prerequisite; 6 hours in Political Science.

432 — Constitutional Law 3 hrs. cr.

Development of the Government of the United States through judicial interpretation of the Constitution. Prerequisite: Political Science 120 or 210.

441, 442 — Independent Study 3 hrs. cr.

Selected readings designed to strengthen specific areas within the student's program, as recommended by the student's adviser. Prerequisite: 9 hours in Political Science and senior standing.

461 — English Constitutional History 3 hrs. cr. (See History 461)

462 — United States Constitutional History 3 hrs. cr. (See History 462).

492 — Seminar in Political Science 3 hrs. cr. A study of analytical reports, research and discussions, de-

COURSES OF INSTRUCTION

signed to give a broad knowledge of the discipline and methods of Political Science. Prerequisite: 6 hours upper division Political Science.

PSYCHOLOGY

Division of Education and Psychology

Dryer, Guilliams, Junkins, Starkey, Volskay, Willis

A major for the Bachelor of Arts degree consists of 32 semester hours. A supporting area of 15 hours is required and may be selected from the natural sciences or mathematics. Also, supporting areas of 15 hours in sociology/anthropology, business, computer science or special education may be selected, but must be accompanied by 5 hrs. of natural science beyond the general education requirement. Required courses in psychology are: Psy 110, Psy 311, Psy 312, Psy 451, Psy 452. A minor consists of 21 semester hours and must include Psy 411. Chemistry 101 or Physics 151, Biology 120 and Math 120 should be taken to fulfill the general education requirements in the natural sciences and mathematics respectively. This will allow completion of the supporting area requirements with the least number of credit hours.

100 — General Psychology **3 hrs. cr.**

An introductory course, stressing the importance of the psychological mechanisms underlying all mental processes, such as sensation, perception, emotion, thinking, and learning. A General Education requirement course. Education and Psychology majors should substitute Psy 110.

110 — Psychology of Human Development **5 hrs. cr.**

An intensive study of the science of psychology; genetic, physiological, intellectual, social, and personality principles and concepts as they affect child and adolescent development and behavior. Observation laboratory required. Approximately one-half the course same as Psy 100. (Should be taken in place of Psy 100 by education and psychology majors. Fulfills General Education Requirements.)

120 — Freshman Orientation **1 hr. cr.**

This course is designed to help the student become adjusted to the college environment. Beginning with personal adjustment and rules and regulations, the course broadens its scope to vocational orientation. It culminates with the advising and enrolling of the student in classes for the next semester. No credit toward psychology major.

200 — Child Psychology and Development **3 hrs. cr.**

Behavior and growth patterns of children are studied. Psycho-

PSYCHOLOGY

logical facts and principles which are necessary for the understanding of the child in his home and school environment. Prerequisite: Psy 100.

210 — Adolescent Psychology **3 hrs. cr.**

A study of the development of the attitudes, interests, problems, and adjustment of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psy 100.

221 — Psychology of Personal Adjustment **3 hrs. cr.**

A study of the basic problems of personality adjustment. Intended to aid the student in promoting better mental health for himself and to better understand the behavior of others.

302 — The Exceptional Child **2 hrs. cr.**

Understanding and guiding the exceptional child through study of child growth and behavior. How to recognize and deal with specific problems of exceptional children. Prerequisite: 5 hrs. Psy.

310 — Educational Psychology **3 hrs. cr.**

Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences of behavior. Prerequisite: Psy 110; or Psy 100 and Psy 200 or Psy 210.

311 — Applied Statistics for the Behavioral and Natural Sciences **3 hrs. cr.**

The measurement and evaluation of behavior and psychological experimentation by quantitative techniques. Prerequisite: Psy 100 or Psy 110.

312 — Experimental Psychology **5 hrs. cr.**

A laboratory course emphasizing the study of animal behavior by scientific methods. Stresses experimental design and research techniques. Prerequisite: Psy 311.

341 — Social Psychology **3 hrs. cr.**

Study of the social behavior of the individual, interests and tendencies that grow out of the community life in terms of inter-group and inter-personal relationships. Prerequisite: Psy 311.

411 — Psychology of Sensation and Perception **3 hrs. cr.**

Nature of the perceptual processes and their relationship to the senses. A laboratory course. Prerequisite: 312 or consent of instructor.

412 — Measurement and Evaluation in Education and Psychology **3 hrs. cr.**

A study of test construction and appraisal. Practice in evaluat-

COURSES OF INSTRUCTION

ing and selecting tests, in administering and scoring, and in the analysis and presentation of test results. Prerequisite: Psy 310 or Psy 311.

422 — Theories of Personality **3 hrs. cr.**

This course is to present an organized summary of the major contemporary theories of personality. Relevant validation research and over-all evaluation of the application of each theory will be considered. Prerequisite: Psy 100 or Psy 110, and consent of instructor.

432 — Abnormal Psychology **3 hrs. cr.**

The nature and etiology of the various forms of behavior disorder, mental deficiency, and other deviations. Critical evaluation of current theories. Visits to hospitals. Prerequisite: Seven hours of psychology.

Psy 442 — Physiological Psychology **3 hrs. cr.**

The study of brain function and brain-behavior relations with overviews of neuroanatomy, neurochemistry, nerve membrane potential, electrical and chemical aspects of synaptic transmission, sensory and motor aspects of brain function, and the integrative aspects of brain function in relation to behavior. Laboratory included. Prerequisite: Bio 120 and Psy 312, or equivalent and consent of instructor.

451 — Psychology of Learning **3 hrs. cr.**

Designed to acquaint the student with the major theories of learning. The theories will be analyzed, compared, and evaluated in the light of current research findings in the area of human and animal learning. Laboratory included. Prerequisite: Psy 310 or Psy 311.

452 — History and Systems of Psychology **3 hrs. cr.**

A study of the various systems of psychology based on historical antecedents and their effects on contemporary scientific psychology. Prerequisite: Psy 311, or consent of instructor.

471 — Group and Individual Intelligence Testing **5 hrs. cr.**

A study of the group and individual intelligence tests with practice in the administering and interpreting of the scores. Emphasis is placed on the Binet and Wechsler Scales. Prerequisite: Psy 412, or equivalent, and consent of instructor.

480 — Seminar in Psychology **1-3 hrs. cr.**

The seminar meets regularly each week. Meeting time per week is equal to the number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

RADIOLOGIC TECHNOLOGY

490 — Independent Study

1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and department head.

RADIOLOGIC TECHNOLOGY

Division of Technology

The Associate of Science degree in Radiologic Technology follows the guidelines established by the American Society of Radiological Technologists of the American Medical Association and the requirements for the Associate of Science degree at Missouri Southern State College. It is offered in affiliation with St. John's Medical Center of Joplin, Missouri. Upon successful completion of the curriculum, the individual is eligible to take the National Registry examinations to become a registered Radiological Technologist.

The Associate of Science in Radiologic Technology requires, in addition to the general education courses (see page 61), All Radiology courses, Bio 221, Psy 221 and Chem 100. Applicants who have not met the prerequisites for Bio 221 must complete them before being admitted to the program.

In addition to established fees for all college students, special fees of \$100 for the first semester and \$40 for each succeeding term, including summers, are required for enrollment in Radiology courses.

101 — Introduction to Radiology

3 hrs. cr.

An overview of the organization, function, supervision, and financing of a radiology department including the relationship with other hospital departments. The course includes a history of x-ray, ethical principles, and legal aspects of technology and elementary radiation protection. Five hours of lecture and five hours of lab per week.

111 — Medical Terminology

5 hrs. cr.

Provides a background in the language of medicine, especially as related to radiology, through a comprehensive study of the more common medical roots, prefixes and suffixes. Every attempt is made to relate medical roots to everyday English words. A survey of medical and surgical diseases is included. Five hours of lecture per week.

121 — Patient Care and Special Procedures in Radiologic Technology

3 hrs. cr.

Routine and special care of the patient. The medical team concept of patient care is stressed. Includes sterile techniques, prep-

COURSES OF INSTRUCTION

aration and use of contrast materials. Five hours of lectures and demonstrations per week.

132 — Principles of Radiographic Exposure 3 hrs. cr.

The fundamental principles of technique and technique conversion with particular emphasis on the factors that directly and indirectly affect radiographic exposure. Emphasis on dark room chemistry and technique are also included in this course. Five hours of lecture and demonstrations per week.

142 — Radiographic Positioning I 3 hrs. cr.

Basic radiographic positioning including both standard and specialized positions of the extremities and the spine. Film critique is included. Five hours of lecture and demonstrations and five hours of clinical lab per week.

152 — Osteology 3 hrs. cr.

The structure and function of the human body with emphasis on organs, osteology, and topographic anatomy. Five hours of lecture and demonstrations per week.

160 — Film Critique 2 hrs. cr.

Develops a student's ability to evaluate x-ray films as to technical quality and diagnostic interpretation. Five hours of lecture and demonstrations per week. Course meets for 14-week session.

170 — Radiologic Physics I 3 hrs. cr.

The physics of radiology. The physical principles of x-ray production, radiographic exposure, film density and construction, fluorescent screens, etc. Basic equipment maintenance is included. Course meets for 14-week session. Five hours of lecture and demonstration and five hours of lab per week.

180 — Practicum in Radiology I 5 hrs. cr.

Designed to develop the knowledge and skills necessary to produce x-ray films with speed and accuracy. Course meets for 14-week session. Twenty-five hours of lab per week.

241 — Radiographic Positioning II 3 hrs. cr.

An in-depth study of routine and special views of the skull and facial bones. Film critique is included. Five hours of lecture and demonstrations and five hours of lab per week.

271 — Radiologic Physics II 3 hrs. cr.

Physical principles of radiation therapy and isotopes. Includes theory, application and basic equipment maintenance. Five hours of lecture and five hours of lab per week.

252 — Radiographic Positioning III 3 hrs. cr.

Procedures and techniques for examination of various organs, including vascular studies and all special procedures. Includes

SOCIOLOGY

film critique. Five hours of lecture and demonstrations and five hours of lab per week.

282 — Practicum in Radiology II **3 hrs. cr.**
A continuation of RAD 180. Ten hours of lab per week.

290 — Practicum in Radiology II **5 hrs. cr.**
Intensive clinical experience in regular working conditions under the close supervision of a Radiologist and an experienced radiation therapy technologist. Course meets for a minimum of 14 weeks. Thirty-five hours of lab work.

299 — Advanced Radiology **3 hrs. cr.**
A comprehensive review of the field of Radiologic Technology including innovations, trends and anticipated advancements in the field. Course meets for a minimum of 14 weeks. Five hours of lecture per week.

SOCIOLOGY

Division of Arts and Sciences

Eli, Grant, Johnson, Rizvi

A major for the Bachelor of Arts degree consists of 30 semester hours. The required courses are: Soc 110, Soc 212, Soc 311, Soc 321, Soc 421, and Soc 432. Supporting area required courses include: Bio 120, or Bio 100 and one of the following; Bio 202, Soc 152, Soc 412; also needed is one course in general statistics or its equivalent. An additional supporting area of 15 hours is also required. The student selects this area in consultation with and by the approval of his advisor.

Sociology may also be used as a minor or supporting area with certain majors. A minor consists of 21 hours.

A social science major for the Bachelor of Science in Education degree, with emphasis in Sociology (Plan B), consists of 50 semester hours. The requirements are: Hist 110, Hist 120, Hist 200, Hist 201 or 202, and three upper division semester hours in U. S. History and three upper division semester hours in European History, Pol Sci 120 and 210, Econ 201, Geo 211 or 222, Soc 110, Soc 321 and electives in Sociology, 14 hours. Nine hours of the electives must be upper division. See page 91 for teacher education requirements.

110 — Introduction to Sociology **3 hrs. cr.**
An introduction to the systematic study of society. The emphasis is on the major concepts of sociology and the scientific point of view in dealing with social phenomena.

121 — Family **3 hrs. cr.**
Development of family relationships throughout the life cycle.

COURSES OF INSTRUCTION

Attention is given to courtship and engagement as well as factors promoting satisfactory family relationships.

152 — Introduction to Anthropology 3 hrs. cr.

Attention is given to both physical and cultural anthropology. There are comparisons between "preliterate" and "literate" cultures.

202 — Social Work 2 hrs. cr.

The historical development, philosophy, and theory forming the basis for professional practice of social work; personal and educational requirements for career opportunities. Prerequisite: Soc 110.

212 — Social Problems 3 hrs. cr.

Study of "problem areas" and "social issues" in modern society. Considers personality adjustment, strains, family problems, population problems, forms of deviancy, and group conflict in a stimulated laboratory atmosphere. The latter part of the course explores "solutions" and social engineering programs. Prerequisite: Soc 110.

301 — Sociology of Religion 3 hrs. cr.

Study of religion as a social institution. Comparative religions considered briefly. Major attention is given to the relationship of religion to other social institutions in contemporary society. Prerequisite: 6 hours of sociology.

311 — Social Stratification 3 hrs. cr.

Analysis of the sociological processes in relation to social situations and interpersonal behavior. Study of factors which account for differences in influence, power, and social prestige. Prerequisite: Soc 110 or permission of the instructor.

321 — Social Institutions 3 hrs. cr.

An analysis of the basic social institutions of human society; comparing and contrasting the structure and form among the various cultures, emphasizing interdependence and effect upon human behavior. Prerequisite: 6 hours of sociology.

322 — Criminology 3 hrs. cr.

Examines the social-cultural concepts of crime and the theories, agencies and institutions which deal with offenders. Particular attention is given to treatment of the offender, the causation of criminal and anti-social behavior, as well as to programs of crime prevention. Prerequisite: Soc 110 and Soc 212 or permission of the instructor.

341 — Social Psychology 3 hrs. cr.

(See Psy 341).

351 — Minority Groups and Race Relations 3 hrs. cr.

An examination of racial and cultural minorities in contempo-

SOCIOLOGY

rary American society with special attention given to an analysis of prejudice and discrimination. Prerequisite: Soc 110.

352 — Group Dynamics **3 hrs. cr.**

A study of the processes underlying group interaction and action emphasizing the importance of leadership and communication in social organization. Prerequisite: Soc 110.

361 — Populations Problems **3 hrs. cr.**

The changes in population are stressed through an analysis of birth rates, death rates, and migrations. Demographic and exo-logical factors are stressed in relation to social stratification, ethnic and minority groups, and cultural settings. Prerequisite: 6 hours of sociology.

362 — Social Pathology **3 hrs. cr.**

Problems of social disorganization and deviant behavior in industrial societies. Deals with such topics as dilemmas of work and leisure, problems of conformity and dissent, the clash of popular myths and social realities, mental illness, alcoholic and narcotic addictions, sexual deviation, suicide, bohemianism, youth protests, alienation, anxiety, and anomie; the ambiguity of "normality."

402 — The Community — Rural and Urban **3 hrs. cr.**

Survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and status communities. Prerequisite: 9 hours of sociology.

412 — Juvenile Delinquency **3 hrs. cr.**

Consideration is given to environment and social background for the study of juvenile delinquency. Emphasis is placed upon factors of causation as revealed through personal, family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Soc 110, Soc 322.

421 — Sociological Theory **3 hrs. cr.**

Classical and contemporary social philosophy related to the current theoretical and applied systems of sociology. A study of social thought from Comte to Parsons, utilizing interpretation and evaluation of these philosophies as they relate to the present social conditions. Prerequisite: 9 hours of sociology.

432 — Sociological Investigations **3 hrs. cr.**

Group and individual research in the scientific and methodological applications of sociology through quantitative and qualitative techniques of obtaining social data. Critical evaluation of the

COURSES OF INSTRUCTION

designs and methods used in sociological research and fieldwork. Prerequisite: 12 hours of sociology.

441 — Collective Behavior **3 hrs. cr.**

A study of the behavior of people in large groups; collective interstimulation and emotions, crowds, audiences, and publics; mass stimuli and mass response.

492 — Independent Study **1-3 hrs. cr.**

Intensive readings in selected areas of Sociology. Prerequisite: Consent of the instructor.

SPEECH AND DRAMA

Division of Arts and Sciences

Brietzke, Bowman, Hunt, Rhodes

A major for the Bachelor of Arts degree consists of 40 semester hours. The student may select a major emphasis in drama or speech.

Required courses for a major emphasis in drama are Dr. 121, 122, 221, 222, Dr. 331-332, Dr. 341, Dr. 351, Dr. 372, Dr. 431, Dr. 442, Sp. 100, Sp. 102, Sp. 211, Sp. 212, Sp. 411.

Required courses for a major emphasis in speech are Sp. 100, Sp. 101, Sp. 102, Sp. 211, Sp. 212, Sp. 300, Sp. 302, Sp. 312, Sp. 411, Forensics Workshop 4 hrs., Dr. 331-332, Dr. 351.

A major in speech and drama in the Bachelor of Science in Education curriculum, one of two teaching fields, consists of 37 semester hours of speech and drama. Either drama or speech may be emphasized.

Required courses for a major emphasis in drama are Dr. 121, Dr. 122, Dr. 221, Dr. 222, Dr. 331-332, Dr. 351, Dr. 372, Dr. 442, Sp. 100, Sp. 102, Sp. 211, Sp. 212, Sp. 300, Sp. Cor. 131.

Required courses for a major emphasis in speech are Sp. 100, Sp. 102, Sp. 211, Sp. 212, Sp. 300, Sp. 302, Sp. 312, Sp. 411, Forensics Workshop 4 hours, Dr. 331-332, Dr. 351. See page 91 for teacher education requirements.

DRAMA

Dr. 101, 102, 201, 202, 301, 302, **1 hr. cr.**
401, 402 — Dramatic Performance

The performance of a major role in a dramatic production. A student may accumulate up to 3 hours of credit. Credit is applied after departmental evaluation and approval at the end of each semester.

110 — Theatre Appreciation **3 hrs. cr.**

Survey of contributions to dramatic production of all ages by playwrights, directors, designers. Appreciation of dramatic form and style. A humanities course for the non-drama major.

SPEECH AND DRAMA

121, 122, 221, 222, 321, 322 — **Theatre Laboratory** **(per sem.) 1 hr. cr.**

A laboratory and, whenever possible, lecture course devoted to the mounting of major productions.

201 — Summer Theatre Production **6 hrs. cr.**

Includes active participation in the summer theatre presentations. Special instruction in voice and diction, movement, acting, and basic stagecraft.

331, 332 — Development of the Drama **(per sem.) 3 hrs. cr.**

(331) History and study of the development of theatre and theatre arts; forms, style, and structure of drama from the Greeks to the Elizabethan era; (332) Jacobean to contemporary American theatre.

341 — Beginning Acting **3 hrs. cr.**

A basic performance and theory course, analysis and creation of a role; stage movement and pantomime; basic stage techniques. Problems in stage speech and dialects for the stage.

351 — Play Production **3 hrs. cr.**

Techniques and problems of mounting a play. Includes a basic analysis of the construction of the drama, along with basic elements of costume, stagecraft, and make-up.

362 — Stage Costume and Design **3 hrs. cr.**

Survey of available materials, period costume, and practical experience in the rendering of costume designs to actual stage costumes.

372 — Directing for the Stage **3 hrs. cr.**

Study of the skill and role of the director, script analysis, casting, production administration, and director-actor relationships. Each student enrolled will have a directing project or will assist the staff as student director for a major production.

410 — Independent Study in Drama **1-3 hrs. cr.**

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by adviser and department head.

422 — Styles in Acting and Interpretation **3 hrs. cr.**

Lecture and laboratory study of physical manners, posture, movement, rhythm, gestures, and vocal qualities in relation to various periods of theatre presentation. Prerequisite: Dr 341.

431 — Creative Dramatics **3 hrs. cr.**

A study of drama for children with emphasis upon the awakening of the creative imagination through various types of literature.

COURSES OF INSTRUCTION

442 — Stage Design 3 hrs. cr.

Principles and history of scenic design, sketching, rendering, scene painting techniques. Study of set design related to various styles of drama. Stage lighting approached from practical and aesthetic values.

SPEECH

100 — Speech Techniques 3 hrs. cr.

A practical course designed to improve or to develop self-expression. Emphasis is placed on development of principles of effective oral communication.

101 — Argumentation and Debate 3 hrs. cr.

A study of the modern forms of evidence, evaluation, and argument, and of methods of refutation and ethical relationships of these methods in a free society.

102 — Public Speaking 3 hrs. cr.

Practice in preparation and delivery of impromptu and extemporaneous speeches.

121-122, 221-222, 321-322, (per sem.) 1 hr. cr.

421-422 — Forensics Workshop

A practicum in the area of forensics, including research, organization, and presentation of the current debate proposition along with the development and presentation of individual events.

211 — Discussion Techniques 3 hrs. cr.

Studies in the field of group discussion designed to point out the different types of discussion through participation.

212 — Oral Interpretation 3 hrs. cr.

Study and application of principles and techniques of oral reading. Includes analysis of different types of literature with emphasis upon platform presentation of prose and poetry.

300 — Speech Composition 3 hrs. cr.

The study and practice of organization, composition, delivery, and analysis of speeches for individual enrichment.

302 — Business and Professional Speech 3 hrs. cr.

A practical course designed to meet the speaking needs of business and professional people.

312 — History and Criticism of Public Address 3 hrs. cr.

A study of the development of Public Address through the ages from the early Greek and Roman rhetoricians and philosophers to the present day.

410 — Independent Study 1-3 hrs. cr.

Study in a selected specialized phase of speech. Prerequisite: Permission of instructor and 3.0 grade average.

SPEECH AND DRAMA

411 — Seminar — Studies in Discussion 3 hrs. cr.

Studies in group thinking and group reaction with a view to improving discussion and conference techniques in the classroom, business and professional situations.

SPEECH CORRECTION

131 — Voice and Articulation 3 hrs. cr.

Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression.

371 — Introduction to Speech Science 3 hrs. cr.

A study of the anatomy, psychology, and physics of speech including the examination of key research on the scientific bases of speech, and the theories and controversial concepts for personal identity, and for social control. Required of students concentrating in speech and recommended for those concentrating in drama.

492 — Principles and Techniques 3 hrs. cr. of Speech Correction

A study of the nature, causes, diagnosis and treatment of speech defects of children and adolescents, primarily for the classroom teachers. Recommended for all students preparing to teach in any field.

PROFESSIONAL, PRE-PROFESSIONAL, AND TECHNOLOGY CURRICULA

PROFESSIONAL (Baccalaureate Degree)

Law

Law students normally work for the Bachelor of Arts degree with a major in English, history, or political science. Consult catalog of law school to which you hope to transfer for directives from that institution.

Medical Technology

The curriculum leading to the Bachelor of Science in Medical Technology degree emphasizes biology and chemistry. The first three years (6 semesters), 94 semester hours, must be completed at Missouri Southern State College (transfer credit will be considered, but the last 30 of the 94 required hours must be earned at MSC); the fourth year must be satisfactorily completed at a school of medical technology approved by the Council on Medical Education and Hospitals of the American Medical Association.

Course requirements, in addition to the general education requirements for the Bachelor of Science degree, are Bio 120, Bio 221, Bio 202, Bio 231, Bio 342, Bio 432, Chem 101, Chem 102, Chem 300, Chem 162, Chem 201, Phy 151, and Phy 152.

COURSES OF INSTRUCTION

After satisfactory completion of the program of study at St. John's Medical Center School of Medical Technology (or other accredited school of Medical Technology) the student qualifies for the degree of Bachelor of Science in Medical Technology from Missouri Southern State College.

PRE-PROFESSIONAL **(Associate of Arts Degree)**

The Junior College transfer curricula are designed for students who desire later to work for a baccalaureate degree at Missouri Southern State College, or to transfer to other baccalaureate degree granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogues of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education at Missouri Southern State College with the intention of earning a baccalaureate degree should study the general education and major requirements for that degree.

The following programs for students planning to enter the fields of Agriculture, Dentistry, Engineering, Journalism, Medicine, Optometry, and Pharmacy lead to the Associate of Arts degree and are normally transferable to other institutions. Each takes two years and 62 or more semester hours to complete. Programs applicable to other fields may be planned in accord with the criteria stated on page 62. The curricula requirements are:

- 1. Agriculture.**
 - a. General Education (see page 58).
 - b. Five semester hours each in chemistry, botany or zoology, and economics.
 - c. Three semester hours each in algebra, accounting, psychology (general), and sociology.
 - d. Ten hours of electives, selected according to transfer needs.
 - e. All courses must be approved by the adviser.
- 2. Dentistry.**
 - a. General Education (see page 58).
 - b. Eight hours of chemistry, five of zoology, five of microbiology, and eight of physics.
 - c. Six hours of electives, selected according to transfer needs.

PRE-PROFESSIONAL CURRICULA

3. Engineering.

The student entering pre-engineering must present four high school units in mathematics and one unit in a laboratory science.

- a. General Education (see page 58).
- b. Mathematics 150, 250 and 260 (15 hrs.)
- c. Chemistry 101 and 102 (8 hrs.)
- d. Drafting 110 and 120* (6 hrs.)
- e. Physics 250 and 260 (10 hrs.)
- f. Electives (4 hrs.)

*Drafting 120, Descriptive Geometry, is not required for chemical or electrical engineers.

4. Journalism.

The student planning to enter a journalism school must complete 60 credit hours in Arts and Science, including the following specific requirements:

- a. General Education (see page 58).
- b. One foreign language (13 hrs.)
- c. Economics (3 hrs.)
- d. U. S. Government (3 hrs.)
- e. English Literature (6 hrs.)
- f. Electives should be chosen from sociology, psychology, philosophy, mathematics, accounting, English, and journalism. (8 hrs.)

5. Medicine.

- a. General Education (see page 58).
- b. One foreign language. (10 hrs.)
- c. Chemistry, qualitative analysis (11 hrs.)
- d. Zoology (10 hrs.)
- e. Physics (8 hrs.)

6. Optometry.

- a. General Education (see page 58).
- b. English literature (3 hrs.)
- c. Algebra and trigonometry (5 hrs.)
- d. Zoology (5 hrs.)
- e. Chemistry (8 hrs.)
- f. Physics (8 hrs.)
- g. General psychology (3 hrs.)
- h. Electives, according to transfer needs (5 hrs.)

7. Pharmacy.

- a. General Education (see page 58).
- b. Algebra and trigonometry (5 hrs.)
- c. Zoology and botany (10 hrs.)
- d. General chemistry (8 hrs.)

COURSES OF INSTRUCTION

e. Physics	(8 hrs.)
f. Accounting	(3 hrs.)
g. Qualitative and quantitative analysis	(8 hrs.)

TECHNOLOGY

(Associate of Science Degree)

The courses of study leading to the Associate of Science degree in Automotive Technology, Computer Science, Cosmetology, Drafting and Design, Law Enforcement, Machine Technology, Nursing and Radiologic Technology are described in the "Curriculum" section of this catalog under their respective headings (see pages 71, 84, 86, 88, 116, 117, 128, 147).

The Suggested Orders of Study for these programs are found on pages 179, 180, 183 immediately following this section.

Additional two-year programs leading to the Associate of Science degree are available in Accounting, General Business, and Secretarial Science.

1. Accounting.

The curriculum prepares students to enter public accounting firms, industry, banking and government service as accounting assistants or accounting clerks. The degree requires completion of:

- a. General education (see page 61).
- b. Acct 101, 102, Acct 211, Acct 212, Acct 401, Econ 201, 202, GB 101, GB 121, GB 301, MM 350, and OA 102 or OA 200.
- c. Five hours of electives which should be selected from business law, auditing, statistics, or mathematics.

2. General Business.

In this program the student prepares for supervisory and managerial positions, or for operating a private business. It provides the fundamental knowledge of marketing and management required for effective business operations. Practical techniques, skills of communication, and good human relations are developed. The degree requires completion of:

- a. General education (see page 61).
- b. Acct 101, 102, Econ 201, 202, GB 101, GB 301, 302, MM 300, MM 350.
- c. Fourteen credit hours of electives selected from the business areas of personnel management, advertising, retailing, salesmanship, and business communications. Selections from psychology are also valid.

3. Secretarial Science.

The secretarial science program helps prepare the student for the professional secretary position. The degree requires completion of:

- a. General education (see page 61).
- b. Acct 101, GB 101, GB 301, OA 200, OA 220, and OA 230.
- c. Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others should be selected from business organization and management, accounting, economics, geography, business communications, general psychology, and office machines.

Certificate of Achievement:**Secretarial-Typist.**

A one-year secretarial certificate program that provides students with training essential to obtaining employment as a secretarial-typist. Successful completion of the required curriculum qualifies the student to a Certificate of Achievement.

The certificate requires the completion of: Acct 101, Eng 101, GB 101, GB 110, GB 121, GB 220, OA 200, OA 210, OA 220, and Speech 100.





SUGGESTED ORDER OF STUDY

SUGGESTED ORDERS OF STUDY

Below are suggested orders of study for some of the college degree offerings. The four-year, baccalaureate programs are listed first. These are followed by the two-year, associate degree programs.

BACCALAUREATE PROGRAMS

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Accounting Approach

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U.S. History 1492-1877	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
GB 101 Introduction to Business	3	Math 130 College Algebra	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary	3
Psy 120 Freshman Orientation	1	Acct 102 Elem. Accounting II	3
Electives	2		—
	—		15
	16		

SOPHOMORE

Acct 212 Intermediate Accounting I	3	Acct 301 Intermediate Accounting II	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Bio 100 General Biology	5	Phys 100 Fundamentals of Physical Science	5
Speech 100 Speech Techniques	3	HPER 160 Personal Health	2
PSc 120 U. S. Government	3	GB 220 Business Communications	3
	—		—
	17		16

JUNIOR

Acct 211 Cost Accounting	3	Acct 302 Advanced Accounting	3
GB 301 Business Law	3	GB 302 Business Law	3
MM 300 Principles of Marketing	3	GB 321 Business Statistics	3
Econ 300 Money and Banking	3	Econ 350 Corporate Finance	3
Fine Arts	3	Humanities	3
	—		—
	15		15

SENIOR

Acct 411 Auditing	3	Elective in Accounting	3
Acct 401 Tax Accounting	3	MM 352 Personnel Management	3
MM 350 Business Organization and Management	3	Electives	9
Humanities	3		—
Electives	3		15
	—		
	15		

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

General Business Approach

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
¹ Eng 101 Composition	3	¹ Eng 102 Composition	3
¹ Psy 100 General Psychology	3	¹ Hist 110 U. S. History 1492-1877	3
¹ HPER 101 Introduction to Physical Activities I	1	¹ HPER 102 Introduction to Physical Activities II	1
² GB 101 Introduction to Business	3	¹ Math 130 College Algebra	3
¹ PSc 120 U. S. Government	1	¹ Spch 100 Speech Techniques	3
¹ Psy 120 Freshman Orientation	1	¹ Humanities	3
Electives	2		
	—		—
	16		16

SOPHOMORE

¹ Bio 100 General Biology	5	¹ Phys 100 Fundamentals of Physical Science	5
¹ Humanities	3	² Acct 102 Elem. Accounting II	3
² Acct 101 Elementary Accounting I	3	² Econ 202 Prin. of Economics	3
¹ Econ 201 Prin. of Economics	3	² GB 220 Business Communications	3
¹ HPER 160 Personal Health or 1-2 one Activity course	1-2	Electives	3
	—		—
	15-16		17

JUNIOR

² GB 301 Business Law I	3	² GB 302 Business Law II	3
² GB 321 Statistics	3	² Econ 350 Corporate Finance	3
² MM 300 Principles of Marketing	3	² MM 352 Personnel Management	3
² Econ 300 Money and Banking	3	¹ Humanities	3
² MM 350 Business Organization and Management	3	Electives	3
	—		—
	15		15

SENIOR

³ Elective in Economics (No. 300 or above)	3	³ Elective in Marketing and Management (No. 300 or above)	3
³ Elective in Business (No. 300 or above)	3	³ Elective in General Business (No. 300 or above)	3
Electives	9	Electives	9
	—		—
	15		15

¹General Education: Area I, 12 hrs. Area II, 11 hrs. Area III, 9 hrs. Area IV, 10 hrs. Area V, 4 hrs. (46 hours)

²General Requirements in Business

³Specific Program Requirements in Business.

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION Marketing and Management Approach

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 100 General Psychology	3	Hist 110 U. S. History 1492-1877	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
GB 101 Introduction to Business	3	Math 130 College Algebra or Equivalent	3
¹ PSc 120 U. S. Government	3		
Psy 120 Freshman Orientation	1	¹ Spch 100 Speech Techniques	3
Electives	2	Electives	2-3
	—		—
	16		15-16

SOPHOMORE

Bio 100 General Biology	5	Phys 100 Fundamentals of Physical Science	5
¹ Humanities	3		
² Acct 101 Elementary Accounting I	3	² Acct 102 Elementary Accounting II	3
Econ 201 Principles of Economics	3	Econ 202 Principals of Economics	3
HPER 160 Personal Health	2	GB 220 Business Communications	3
	—	Electives	3
	16		—
			17

JUNIOR

GB 301 Business Law	3	GB 302 Business Law	3
Fine Arts	3	GB 321 Business Statistics	3
MM 300 Principles of Marketing	3	Econ 350 Corporate Finance	3
MM 350 Business Organization and Management	3	MM 352 Personnel Management	3
Econ 300 Money and Banking	3	MM 312 Retailing	3
	—		—
	15		15

SENIOR

Humanities	3	MM 412 Marketing Management	3
MM 401 Advertising	3	MM 452 Business Policy	3
MM 431 Production Management	3	Electives in Business or Econ.	3
Electives	6	Electives	6
	—		—
	15		15

SUGGESTED ORDER OF STUDY

**Bachelor of Science
Mathematics Major**

Suggested Order of Study

(Freshman Year Only)

1st Semester

2nd Semester

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 150 Calculus with	5	Math 250 Calculus with	5
Analytic Geometry I		Analytic Geometry II	3
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
(General Education Course)	2	(General Education Course)	3
HPER 151 Foundations of	1	HPER 152 Foundations of	1
Physical Activities I		Physical Activities II	
Psy 120 Freshman Orientation	1	Math 271 Selected Topics	1
		in Mathematics	

MEDICAL TECHNOLOGY

Suggested Order of Study

FIRST YEAR

Course	Hours	Course	Hours
Math 100 Slide Rule	1	Eng 102 Composition	3
Eng 101 Composition	3	Bio 120 General Zoology	5
Chem 101 General Chemistry I	5	Chef 102 General Chemistry II	3
Math 140 Algebra and Trigonometry	5	Hist 110 U. S. History	3
Psy 120 Freshman Orientation	1	HPER 102 Introduction to Physical Activities II	1
HPER 101 Introduction to Physical Activities I	1		
	—		—
	16		15

SECOND YEAR

Eng 120 Masterpieces of World Literature	3	Eng 210 English Literature	3
Psy 100 General Psychology	3	Speech 100 Speech Techniques	3
Chem 300 Organic and Biological Chemistry	5	Chem 162 Qualitative Analysis	3
Bio 221 Human Anatomy and Physiology	5	Sol 110 Introduction to Sociology	3
	—	Bio 202 Genetics	3

SUGGESTED ORDER OF STUDY

THIRD YEAR

Course	Hours	Course	Hours
Art 110 Introduction to Art	3	PSc 210 State and Local	3
Chem 201 Quantitative Analysis	5	Government	
Bio 231 Fundamentals of	5	Phy 152 Elementary College	3
Medical Microbiology		Physics II	
Phy 151 Elementary College	5	Bio 432 Histology	3
Physics I		Bio 342 Microtechnique	2
		HPER 160 Personal Health	2
		Elective	3
	—		—
	18		16

FOURTH YEAR

The fourth year consists of twelve months of study at an accredited school of medical Technology (see page 147).

BACHELOR OF SCIENCE IN PHYSICS

Suggested Order of Study

**(Student "A". This student takes Math 150 Calculus I
the first semester of his freshman year.)**

1st Semester

2nd Semester

FRESHMAN

Phys 250 General Physics I	5	Phys 260 General Physics II	5
Math 150 Calculus and	5	Math 250 Calculus and	5
Analytic Geometry I		Analytic Geometry II	
*Chem 101 General Chemistry I	5	*Chem 102 General Chemistry II	3
HPER 101 Introduction to	1	Eng 101 Composition	3
Physical Activities I			
	—		—
	16		16

SOPHOMORE

Phys 301 Modern Physics	5	Phys 372 Electronic Circuits	4
Math 260 Calculus and	5	Phys 322 Classical Mechanics I	3
Analytic Geometry III		Math 322 Differential Equations	3
Eng 102 Composition	3	Psy 100 General Psychology	3
Hist 110 U. S. History 1492-1877	3	Eng 120 or 130 World Literature	3
or Hist 120 U. S. History			
1877 to the Present			
HPER 102 Introduction to	1		
Physical Activities II			
	—		—
	17		16

SUGGESTED ORDER OF STUDY

1st Semester

JUNIOR

Course	Hours	Course	Hours
Phys 381 Intermediate Physics Laboratory	3	Phys 452 Quantum Mechanics or elective	3
Phys 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	Math 152 Introduction to Programming	2
*Math 412 Vector Analysis or Math 431 Numerical Analysis	3	PSc 120 State Government or PSc 210 U. S. Government	3
Bio 100 General Biology	5	Eng 210 or 220 English Literature	3
	—	Area II Gen. Ed.	3
	15		—
			14

SENIOR

*Phys 481 Advanced Physics Lab	1-3	Phys 452 Quantum Mechanics or elective	3
Phyr 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	Phys 492 Physics Seminar	1
*Math 412 Vector Analysis or Math 431 Numerical Analysis	3	Area III Gen. Ed.	3
HPER 160 Personal Health Elective	2	Spch 100 Speech Techniques	3
	3	Electives	6
	—		—
	13-15		16

BACHELOR OF SCIENCE IN PHYSICS

Suggested Order of Study

Student "B". This student takes Math 140 Algebra and Trigonometry the first semester of his freshman year.)

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Math 140 Algebra and Trigonometry	5	Phys 250 General Physics I	5
*Chem 101 General Chemistry I	5	Math 150 Calculus and Analytic Geometry I	5
Eng 101 Composition	3	*Chem 102 General Chemistry II	3
HPER 101 Introduction to Physical Activities I	1	Eng 102 Composition	3
Area II General Ed.	3	HPER 102 Introduction to Physical Activities II	1
	—		—
	17		17

*Recommended but not required.

SUGGESTED ORDER OF STUDY

SOPHOMORE

Phys 260 General Physics II	5	Phys 301 Modern Physics	4
Math 250 Calculus and Analytic Geometry II	5	Phys 372 Electronic Circuits	4
Psy 100 General Psychology	3	Math 260 Calculus and Analytic Geometry III	5
HPER 160 Personal Health	2	Math 322 Differential Equations	3
	—		—
	15		16

JUNIOR

Phys 381 Intermediate Physics Laboratory or Phys 322 Classical Mechanics	3	*Math 152 Introduction to Programming	2
Phys 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	Phys 452 Quantum Mechanics or elective	3
Eng 120 or 130 World Lit.	3	Spch 100 Speech Techniques	3
Hist 110 U. S. History 1492-1877 or Hist 120 U. S. History 1877 to the Present	3	PSc 120 State Government or PSc 210 U. S. Government	3
*Math 412 Vector Analysis	3	Bio 100 General Biology	5
	—		—
	16		16

SENIOR

*Math 431 Numerical Analysis	3	Phys 452 Quantum Mechanics	3
Phys 341 Thermal Physics or Phys 401 Electricity and Magnetism	4	or elective	
Phys 381 Intermediate Physics Laboratory or Phys 322 Classical Mechanics	3	Eng 210 or 220 English Lit.	3
Electives	6	Area III General Ed.	3
	—	Electives	6
	16		—
			15

BACHELOR OF ARTS

Psychology Major

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Eng 101 Composition	3	Eng 102 Composition	3
Math 140 College Algebra and Trigonometry	5	Hist 120 U. S. History 1877 to the Present	3
Psy 110 Psychology of Human Development	5	Bio 120 General Zoology	5
HPER 101 Introduction to Physical Activities I	1	Psy Elective	3
Psy 120 Freshman Orientation	1	HPER 102 Introduction to Physical Activities II	1
	—		—
	15		15

*Recommended but not required.

SUGGESTED ORDER OF STUDY

SOPHOMORE

Course	Hours	Course	Hours
Psy 311 Statistics	3	Psy 312 Experimental Psychology	5
Bio 221 Human Anatomy and Physiology	5	Chem 101 Chemistry or Psychology	5
Eng 120 or 130 World Literature	3	Eng 210 or 220 English Literature	3
HPER 160 Personal Health	2	Spch 100 Speech Techniques or Speech	3
Soc 110 General Sociology or Geology 211 or Economics 201	3	202	
	16		
	—		16

JUNIOR

Foreign Language	5	Foreign Language	5
Bio 331 Comparative Chordate	5	Psy 422 Theories of Personality	3
Psy 451 Psychology of Learning	3	PSc 210 State Government	3
Comp 100 Basic Computing Machines	3	Art 110 Introduction to Contemporary Art or Dr 110 Music 110 or Phil 201	3
		Psy 412 Meas and Eval	3
	—		—
	16		17

SENIOR

Psy 411 Sensation and Perception	3	Psy 442 Physiological Psychology	3
Psy 480 Seminar	3	Psy 452 History and Systems of Psychology	3
Psy 490 Independent Study	1-3	Psy Electives	3
Psy Elective (Upper Division)	3	Electives (Upper Division)	
Electives (Upper Division)	4-6		
	—		—
	16		16

One of the Support Areas Below (Major hours only acceptable)

Biology and/or Chemistry	15	Math and/or Comp. Science	15
Biology and/or Physics	15	Sociology and/or Anthropology	15
Chemistry/or Physics	15	Marketing and Management	15

Psychology Electives:

Psy 200 Child Psychology and Development	Psy 412 Measurement and Evaluation in Education and Psychology
Psy 210 Adolescent Psychology	Psy 422 Theories of Personality
Psy 221 Psychology of Personal Adjustment	Psy 432 Abnormal Psychology
Psy 302 The Exceptional Child	Psy 471 Group and Individual Intelligence Testing
Psy 310 Educational Psychology	Psy 480 Seminar in Psychology
Psy 341 Social Psychology	Psy 490 Independent Study

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION DEGREE

WITH A MAJOR IN BUSINESS

Suggested Order of Study

Option B—Single Teaching Field

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Sng 102 Composition	3
Hist 110 U. S. History 1492-1877	3	PSc 120 United States	3
Humanities	3	Government or PSc 210	
Psy 110 Psy of Human Development	5	State or Local Government	
HPER 101 Introduction to Physical Activities I	1	Speech 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	Humanities	3
		HPER 102 Introduction to Physical Activities II	1
		Math 110 Introduction to College Mathematics	3
		Mathematics or Math 130 College Algebra	
	—		—
	16		16

SOPHOMORE

Phys 100 Fundamentals of Physical Science	5	Bio 100 General Biology	5
Humanities	3	Econ 202 Principles of Economics	3
HPER 160 Personal Health	2	GB 121 Office Machines	3
Econ 201 Principles of Economics	3	Acct 102 Elementary Accounting II	3
Acct 101 Elementary Accounting I	3	Comp 100 Basic Computing Machines	3
	—		—
	15-16		17

JUNIOR

Acct 212 Intermediate Accounting, or Acct 211	3	GB 302 Business Law	3
Cost Accounting, or Acct 401 Tax Accounting		GB 220 Business Communications	3
GB 301 Business Law	3	Psy 310 Educational Psychology	3
OA Shorthand or a business elective	3	OA Typewriting	3
MM 350 Business Organization and Management	3	OA Shorthand or a business elective	3
One activity course if needed	1		
OA Typewriting	3		
	—		—
	16		15

SENIOR

Educ 330 Structure of Teaching —Secondary	5	Professional semester	15
Business electives (No. 300 or above)	12		
	—		—
	17		

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION

Elementary Education Major

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 U. S. History 1877 to the Present	3
Hist 1f0 U. S. History 1492-1877	3	Art 110 Introduction to Contemporary Art or Music 110 or Dr. 110	3
Math 110 Introduction to College Mathematics I	3	Math 120 Introduction to College Mathematics II	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1	PSc 210 State Government	3
	—		—
	16		16

SOPHOMORE

Eng 120 or 130 World Literature	3	Geo 211 Regions and Nations	3
Phys 100 Introduction to Physical Science	5	Psy 310 Educational Psychology	3
Music 262 Music in Elementary School	3	Eng 222 Children's Literature	3
Spch 100 Techniques of Speech	3	Art 220 Art Education	3
Elective Economics or Anthropology	3	Bio 100 General Biology	5
	—		—
	17		17

JUNIOR

Eng 301 Structure of American English	3	HPER 370 School and Community Health	3
HPSR 311 P.E. in Elementary School	2	Educ 312 Problems in Arithmetic	2
Eng 210 or 220 English Literature	3	Educ 340 Lang Art and Reading	5
Educ 320 Structure of Teaching	5	Psy 302 Exceptional Child	2
Hist 201 or 202 European History	3	Electives (on supporting area)	4
	—		—
	16		16

SUGGESTED ORDER OF STUDY

1st Semester

SENIOR

Course	Hours	Course	Hours
Eluc 370 Introduction to Instructional Media	2	PROFESSIONAL SEMESTER	
Educ 311 Science in Elem Sch	2	Educ 432 Critical Issues in Education	3
Bio 310 Field Biology	2	Educ 402 History of Education	3
Educ 351 Teaching the Mentally Retarded or Speech 492 (or Education 352)	3	Psy 412 Measurements and Evaluation or Educ 412	(3) (3)
Educ 492 Remed and Diag Reading	2	Social Foundation of Curriculum Development	
Electives	5	Educ 442 Student Teaching Elementary	6
	—	Psy 451 Psy of Learning	2
	16		—
			17

After the first year the semesters can be interchanged.

*Students whose last names begin with the letters A-L should plan to student teach during the first semester.

BACHELOR OF SCIENCE IN EDUCATION

English Major

Suggested Order of Study

1st Semester

FRESHMAN

Course	Hours	Course	Hours
*Eng 101 Composition	3	English 102 Composition	3
History 110 or 120	3	Physical Science 100	5
Psychology 110	5	English 210	3
Math 110	3	English Elective	3
HPER 101	1	HPER 102	1
Orientation (Psy 120)	1		
	—		—
	16		15

*Students who qualify take English 111 instead of English 101-102.

SOPHOMORE

English 220 English Lit.	3	English 301 or 310	3
Biological Science	5	English 312	3
English 311	3	Psychology 310	3
HPER 160	2	Fine Arts Elective	3
*Elective	3	Elective	3
	—		—
	16		15

*Foreign language is recommended.

SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
Course	Hours	Course	Hours
English 315	3	English 319	3
Speech 100 or 102	3	Education 330	5
English 331 or 332	3	Political Science 120 or 210	3
Education 422	2	English Elective	3
Social Science Elective	3	Elective	3
English Elective	3		
	—		—
	17		17

***English 331 or English 332 is required.

SENIOR			
English Electives	9	Education 462	6
Electives	6	Education 402	3
		Education 432	3
		Psychology 412 or	3
		Psychology 451	
	—		—
	15		15

BACHELOR OF SCIENCE IN EDUCATION

Men's Physical Education

(Single Teaching Field)

Suggested Order of Study

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
HPER 160 Personal Health	2	Hist 120 U. S. History 1877	3
Phys 100 Fundamentals of Physical Science	5	to the present or Elective	
HPER 150 Introduction to Professional Physical Education	2	Bio 120 Zoology	5
PSc 210 State Government	3	Psy 110 Psychology of Human Development	5
Psy 120 Freshman Orientation	1		
	—		—
	16		16

SOPHOMORE

Math 110 Introduction to College Math I	3	Soc 152 Anthropology	3
Eng 120 or 130 World Literature	3	Psy 310 Educational Psychology	3
Spch 100 Speech Techniques	3	Bio 221 Human Anatomy and Physiology	5
HPER 251 Fundamentals of Physical Education Activities I	4	HPER 252 Fundamentals of Physical Education Activities I	4
Music 110 Music Appreciation or Phil 201 or Art 110 or Dr 110	3	Swimming Elective	1
	—		—
	16		16

SUGGESTED ORDER OF STUDY

1st Semester

2nd Semester

JUNIOR

Course	Hours	Course	Hours
Eng 210 or 220 English Literature	3	Educ 330 Structure of Teaching	4
HPER 370 School and Community Health	3	Educ 331 Video Teaching	1
HPER 310 Elementary School Physical Education Programs	3	HPER 312 Teaching Elementary School Physical Education	2
HPER 351 Theory of Football	3	HPER 342 Kinesiology	3
HPER 331 Theory and Analysis of Selected Team Sports	2	HPER 350 Theory of Basketball	2
Elective	2	HPER 352 Theory of Spring Sports	2
	—	Elective	2
	16		—
			16

SENIOR

Course	Hours	PROFESSIONAL SEMESTER	Hours
HPER 410 History and Philosophy of Physical Education	3	Psy 412 Measurement and Evaluation	3
HPER 470 Administration of Physical Education	3	Educ 402 History and Philosophy of Education	3
HPER 450 Care and Prevention of Injuries or HPER 220 First Aid or HPER 230 Safety	3	Educ 442 Critical Issues in Education	3
HPER 431 Administration of the Interscholastic Programs	3	Educ 444 Student Teaching (Elementary)	(3)
Electives	3	Educ 464 Student Teaching or (Secondary)	(3)
	—	Educ 462 Student Teaching Secondary	6
	15		—
			15

BACHELOR OF SCIENCE IN EDUCATION

Women's Physical Education

(Single Teaching Field)

FRESHMAN

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 U. S. History 1492-1877	3	Bio 120 Zoology	5
Phys 100 Fundamentals of Physical Science	5	Psy 110 Psychology of Human Development	5
HPER 150 Introduction to Professional Physical Education	2	HPER 160 Personal Health	2
PSc 210 State Government	3		
Psy 120 Freshman Orientation	1		
	—		
	17		—
			15

SUGGESTED ORDER OF STUDY

1st Semester

2nd Semester

SOPHOMORE

Course	Hours	Course	Hours
Math 110 Introduction to College Math I	3	Soc 152 Anthropology	3
Spch 100 Speech Techniques	3	PSc 310 Educational Psychology	3
Eng 120 or 130 World Literature	3	Bio 221 Human Anatomy and Physiology	5
HPER 251 Fundamentals of Physical Education Activities I	4	HPER 252 Fundamentals of Physical Education Activities I	4
Music 110 Music Appreciation or Phil 201 or Dr 110 or Art 110	3	Swimming Elective	1
	—		—
	16		16

JUNIOR

Eng 210 or 220 English Literature	3	Educ 330 Structure of Teaching	5
HPER 370 School and Community Health	3	HPER 312 Teaching Elementary School Physical Education	2
HPER 321 Theory and Analysis of Selected Team Sports	3	HPER 342 Kinesiology	4
HPER 310 Elementary School Physical Education	3	HPER 332 Rhythmic Form and Analysis	2
Elective	3-4	HPER 322 Theory and Analysis of Selected Individual Sports	3
	—		—
	15-16		16

SENIOR

PROFESSIONAL SEMESTER	
Psy 412 Measurement and Evaluation	3
Eluc 402 History and Philosophy of Education	3
Educ 432 Critical Issues in Education	3
Educ 444 Student Teaching (Elementary)	(3)
Eluc 464 Student Teaching or (Secondary)	(3)
Educ 462 Student Teaching Secondary	6
	—
	15

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SOCIAL SCIENCE (HISTORY EMPHASIS)

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
2Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 History 1877 to Present	3
Hist 110 U. S. History 1492-1877	3	Art 110 Intro to Art or Music 110	3
3Math 110 Intro to College Math	3	Music Appreciation or	
HPER 101 Intro to Phys Act I	1	Drama 110 Theatre	
Psy 120 Freshman Orientation	1	Appreciation or Phil	
		201 Intro to Philosophy	
		PSc 120 U. S. Government	3
		Hist 200 Western Civ to 1500	3
		HPER 102 Intro to Phys	1
		Activities	
	—		—
	16		16

SOPHOMORE

Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Lit	3
Eng 120 or 130 Mastp of World Lit	3	4Bio 100 General Biology	1
Pol Sc 210 State and Local Government	3	or any 5 hour course in Biology	
Soc 110 Intro to Sociology	3	European Hist 201 or 202	3
HPER 160 Personal Health	2	Modern Europe	
HPER 102 Intro to Phys Act	1	Geo 211 Regions and Nations	3
	—	or Geo 222 Economic Geography	
	17	Spch 100 Speech Techniques	3
			—
			17

JUNIOR

Econ 201 Principles of Economics	3	Upper Level History	6
Upper Level Social Science Elective	3	Ed 330 Structures of Teaching	5
Upper Level History	6	Social Science Electives	6
Psy 310 Educational Psychology	3	(It is recommended that the student have upper level courses in all the areas of Social Science, that is, Hist, Pol. Sc, Geo, and Soc)	
	—		—
	15		17

SUGGESTED ORDER OF STUDY

1st Semester		2nd Semester	
SENIOR			
Course	Hours	Course	Hours
Education 462 Student Teaching	6	Upper Level History	6
Ed 432 Critical Issues in Educ.	3	Social Science Electives	9
Ed 402 History and Philosophy of Education	3		
Psy 412 Measurement and Evaluation or Psy 451 Psychology of Learning	3		
	—		—
	15		155

¹The suggested order of study for the Bachelor of Arts degree is the same with the following exception: Students taking the Bachelor of Arts degree must complete 10 hours of the same foreign language or its equivalent in addition to the nine hours required in Area 3. A candidate for the Bachelor of Arts degree should consult with his advisor.

²Students who qualify for English 111 satisfy the composition requirement for this course.

³Higher level mathematics courses also satisfy this requirement.

⁴It is recommended that Sociology majors register for Biology 120 or Biology 202.

⁵The Social Science major with an emphasis in History must select 6 upper level hours in European History, 6 upper level hours in United States History. The other 6 upper level hours may be selected from any area of History. For example, United States History, European History, or English History.

BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN 'SOCIAL SCIENCE (POLITICAL SCIENCE EMPHASIS)

Suggested Order of Study

1st Semester		2nd Semester	
FRESHMAN			
Course	Hours	Course	Hours
² Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 History 1877 to Present	3
Hist 110 U. S. History 1492-1877	3	Art 110 Intro to Art	3
³ Math 110 Intro to College Math	3	or Music 110 Music	
HPER 101 Intro to Phys Act I	1	Appreciation or Drama	
Psy 120 Freshman Orientation	1	110 Theatre Appreciation	
		or Phil 201 Intro to Philosophy	
		PSc 120 U. S. Government	3
		Hist 200 Western Civ to 1500	3
		HPER 102 Intro to Phys Activities	1
	—		—
	16		16

SUGGESTED ORDER OF STUDY

1st Semester

SOPHOMORE

Course	Hours	Course	Hours
Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Lit Bio 100 General Biology or any 5 hour course in Biology	3
Eng 120 or 130 Masp of World Lit	3	European Hist 201 or 202 Modern Europe	3
Pol Sc 210 State and Local Government	3	Geo 211 Regions and Nations or Geo 222 Economic Geography	3
Soc 110 Intro to Sociology	3	Spch 100 Speech Techniques	3
HPER 160 Personal Health	2		
	—		
	16		17

JUNIOR

Econ 202 Principles of Economics 3	Upper Level Political Science	6
⁴ Upper Level U. S. History 3	Ed 330 Structures of Teaching	5
Upper Level Political Science 6	Social Science Electives	6
Psy 310 Educational Psychology 3	(It is recommended that the student have upper level courses in all areas of Social Science, that is Hist, Pol Sc, Geo, and Soc)	
	—	—
	15	17

SENIOR

Ed 462 Student Teaching Secondary	6	Upper Level Political Science	3
Ed 432 Critical Issues in Education	3	Upper Level European History	3
Ed 402 History and Philosophy of Education	3	Upper Level Elective Hours	9
Psy 412 Measurements and Evaluation or Psy 451 Psychology of Learning	3	(Attention should be given to the electives so that the stu- dent may have a supporting area.)	
	—		—
	15		15

¹The suggested order of study for the Bachelor of Arts degree is the same with the following exception: Students taking the Bachelor of Arts degree must complete 10 hours of the same foreign language or its equivalent in addition to the nine hours required in Area 3. A candidate for the Bachelor of Arts degree should consult with his advisor.

²Students who qualify for English 111 satisfy the composition requirement for this course.

³Higher level mathematics courses also satisfy this requirement.

⁴The Social Science Major with an emphasis in Political Science must select 3 upper level hours in U. S. History and 3 upper level hours in European History.

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SOCIAL SCIENCE (SOCIOLOGY EMPHASIS)

Suggested Order of Study

1st Semester

2nd Semester

FRESHMAN

Course	Hours	Course	Hours
2Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Human Development	5	Hist 120 History 1877 to Present	3
Hist 110 U. S. History 1492-1877	3	Art 110 Intro to Art or	3
3Math 110 Intro to College Math	3	Music 110 Music	
HPER 101 Intro to Phys Act I	1	Appreciation or Drama	
Psy 120 Freshman Orientation	1	110 Theatre Appreciation	
		or Phil 201 Intro to	
		Philosophy	
		PSc 120 U. S. Government	3
		Hist 200 Western Civ to 1500	3
		HPER 102 Intro to Phys	1
		Activities	
	—		—
	16		16

SOPHOMORE

Phys Sc 100 Fund of Phys Sc or any 5 hour course in Chem or Phys	5	Eng 210 or 220 English Lit	3
Eng 120 or 130 Mastp of World Lit	3	4Bio 100 General Biology or any 5 hour course in Biology	5
Pol Sc 210 State and Local Government	3	European Hist 202 or 202 Modern Europe	3
Soc 110 Intro to Sociology	3	Geo 211 Regions and Nations or	3
HPER 160 Personal Health	2	Geo 222 Economic Geography	
	—	Spch 100 Speech Techniques	3
	16		—
			17

JUNIOR

Econ 201 Principles of Economics	3	Upper Level Electives in Sociology	6
5Upper Level United States History	3	Upper Level Elective	3
Upper Level Electives in Sociology	6	Ed 330 Structures of Teaching	5
Psy 310 Educational Psychology	3	Social Science Elective	3
		(It is recommended that the student have upper level courses in all areas of Social Science, that is, Hist, Pol Sc, Geo, and Soc)	
	—		—
	15		17

SUGGESTED ORDER OF STUDY

1st Semester

2nd Semester

SENIOR

Course	Hours	Course	Hours
Ed 462 Student Teaching Secondary	6	Upper Level Elective in Sociology	3
Ed 432 Critical Issues in Education	3	Upper Level European History	3
Ed 402 History and Philosophy of Education	3	Upper Level Electives in Sociology	9
Psy 412 Measurements and Evaluations or Psy 451 Psychology of Learning	3		
	—		—
	15		15

¹The suggested order of study for the Bachelor of Arts degree is the same with the following exception: Students taking the Bachelor of Arts degree must complete 10 hours of the same foreign language or its equivalent in addition to the nine hours required in Area 3. A candidate for the Bachelor of Arts degree should consult with his advisor.

²Students who qualify for English III satisfy the composition requirement for this course.

³Higher level mathematics courses also satisfy this requirement.

⁴It is recommended that Sociology majors register for Biology 120 or Biology 202.

⁵The Social Science major with an emphasis in Sociology must select 3 upper level hours in U. S. History and 3 upper level hours in European History.

ASSOCIATE OF ARTS DEGREE

Pre-Engineering

(Freshman Year Only)

Eng 101 Composition	3	Eng 102 Composition	3
Math 150 Calculus and Analytic Geometry I	5	Math 250 Calculus and Analytic Geometry II	5
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
*Draf 110 Introductory Drafting	3	*Draf 120 Descriptive Geometry	3
HPER 101 Introduction to Physical Activities I	1	Phys 250 General Physics I or **Chem 162 Qualitative Analysis	5
Psy 120 Freshman Orientation	1	General Education	3
	—		—
	18		17 to 19

*Required of civil and mechanical engineers. Student should check catalog of the College to which he expects to transfer for requirements in this area.

**Chemical Engineers must choose Chem 162 instead of Phys 250 and choose 3 to 5 hours of General Education requirements.

SUGGESTED ORDER OF STUDY

TECHNOLOGY ASSOCIATE OF SCIENCE Accounting Suggested Order of Study

1st Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	Psy 100 General Psychology	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
GB 101 Introduction to Business	3	Spch 100 Speech Techniques	3
GB 121 Office Machines	3	OA 102 Intermediate Typewriting	3
Math 20-30 Beg. and Inter. Algebra (or Math 110)	3	PSc U. S. Government	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1		
	—		—
	17		16

SECOND YEAR

Bio 100 General Biology	5	Econ 202 Principles of Economics	3
Econ 201 Principles of Economics	3	MM 350 Business Org. and M'gmt.	3
Acct 212 Intermediate Accounting	3	Acct 401 Tax Accounting	3
Acct 211 Cost Accounting	3	Elective	6
GB 301 Business Law	3		—
	—		—
	17		15

ASSOCIATE OF SCIENCE Automotive Technology

FIRST YEAR

Auto 120 Automotive Electrical	5	Auto 120 Automotive Electrical and Emission Control	5
Math 20-30 Beginning and Intermediate Algebra	3	Auto 110 Technical Mathtmatics	3
Eng 101 Composition	3	Draf 110 Introductory Drafting	3
Phy 100 Physical Science	5	Psy 100 General Psychology	3
Psy 120 Freshman Orientation	1	Spch 100 Speech Techniques	3
	—		—
	17		17

SECOND YEAR

Auto 200 Automotive Chassis, Brakes and Transmissions	5	Auto 250 Automotive Body and Paint	5
Auto 220 Automotive Refrigeration and Air Conditioning	3	Auto 260 Automotive Service Management	5
Auto 190 Technical Science	4	Auto 130 Automotive Business Management	3
Art 132 Introduction to Design	3	Hist 110 United States History 1492-1877	3
HPER 160 Personal Health	2		—
	—		—
	17		16

SUGGESTED ORDER OF STUDY

ASSOCIATE OF SCIENCE
Computer Programming
Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	PSc 120 U. S. Government	3
Math 140 Algebra &	5	GB 220 Business Communications	3
Trigonometry		Acct 102 Elementary	3
Acct 101 Elementary Accounting I	3	Accounting II	
Comp 100 Basic Computing	3	Comp 120 Introduction to	3
Machines		Programming	
Comp 110 Key-Punch Operation	3	Spch 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	HPER 101 Introduction to	1
		Physical Activities I	

18 SECOND YEAR

SECOND YEAR			
Phys 100 Fundamentals of Physical Science	5	Comp 150 Computer Machines and Machine Language	3
Acct 211 Cost Accounting (or Acct 212)	3	Comp 200 Systems Development and Design	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Comp 130 Advanced Programming	3	GB 321 Statistics	3
Comp 140 Data Processing Applications	3	Psy 100 General Psychology	3
HPER 102 Introduction to Physical Activities II	1	Eng 120 World Masterpieces	3
	—		
	18		18

ASSOCIATE OF SCIENCE
Computing Analysis
Suggested Order of Study

FIRST YEAR

COURSE		CR.	DESCRIPTION	CR.
Eng 101 English Composition	3	Comp 130 Advanced	3	
Math 150 Calculus &	5	Programming		
Analytical Geometry I		Math 250 Calculus &	5	
Comp 120 Introduction to	3	Analytical Geometry II		
Programming		Phys 250 General Physics I	5	
Psy 100 General Psychology	3	Comp 140 Data Processing	3	
PSc 120 U. S. Government	3	Applications		
Psy 120 Freshman Orientation	1	HPER 101 Physical Activity	1	
	—			
	18			17

15
SECOND YEAR

SECOND YEAR		
Math 260 Calculus & Analytical Geometry III	5	Math 322 Differential Equations
Phys 260 General Physics II	5	Math 431 Numerical Analysis
Comp 150 Computer Machines	3	Comp 220 Analog Computers
Phys 272 Statics	3	Spch 100 Speech Techniques
HPER 102 Physical Activity	1	Math 361 Problems & Statistics
	—	Eng 120 World Masterpieces
	17	18

SUGGESTED ORDER OF STUDY

SUGGESTED ORDER OF STUDY FOR COSMETOLOGY ASSOCIATE OF SCIENCE PROGRAM

1st Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	GB 101 Introduction to Business	3
Psy 100 General Psychology	3	Math 20-30 Beginning and	3
GB 110 Business Mathematics	3	Intermediate Algebra	
HPER 160 Personal Health	2	Bio 100 General Biology	5
Psy 120 Freshman Orientation	1	Cos 110 Theory and Practice	5
Cos 100 Introduction to	5	of Cosmetology	
Cosmetology			
	—		—
	17		16

SUMMER

Cos 120 Cosmetology Practice 5
and Procedures

SECOND YEAR

Acct 101 Elementary Accounting	3	Art 132 Introduction to Design	3
Spch 100 Speech Techniques	3	GB 220 Business Communication	3
Hist 110 United States History	3	Psy 221 Psychology of Personal	3
Econ 202 Principles of Economics	3	Adjustment	
Cos 200 Advanced Theory and	5	MM 350 Business Organization	3
Practice of Cosmetology		and Management	
	—	Cos 210 Wig Training and	5
	17	Cosmetic Applications	
	—		—
	17		17

ASSOCIATE OF SCIENCE Electronic Data Processing Coordination Suggested Order of Study

1st Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	PSc 120 U. S. Government	3
Math 130 College Algebra	3	Acct 102 Elementary	3
Acct 101 Elementary	3	Accounting II	
Accounting I		Comp 110 Key-Punch Operation	3
Comp 100 Basic Computing	3	OA 102 Intermediate Typewriting	3
Machines		OA 120 Intermediate Shorthand	3
GB 101 Introduction to Business	3	HPER 102 Introduction to	1
HPER 101 Introduction to	1	Physical Activities II	
Physical Activities I			
Psy 120 Freshman Orientation	1		
	—		—
	17		16

SUGGESTED ORDER OF STUDY

1st Semester

2nd Semester

SECOND YEAR

Course	Hours	Course	Hours
Psy 100 General Psychology	3	Bio 100 General Biology	5
Comp 120 Introduction to Programming	3	Spch 100 Speech Techniques	3
GB 321 Statistics	3	Comp 130 Advanced Programming	3
OA 200 Advanced Typewriting	3	GB 220 Business Communications	3
Econ 201 Principles of Economics	3	GB 121 Office Machines	3
Eng 120 World Masterpieces	3		
	—		—
	18		17

ASSOCIATE OF SCIENCE

Drafting and Design

Suggested Order of Study

FIRST YEAR

Course	Hours	Course	Hours
Draf 110 Introductory Drafting	3	Draf 120 Descriptive Geometry	3
Eng 101 Composition	3	Draf 130 Machine Drafting	3
Art 110 Introduction to Art	3	Spch 100 Speech Techniques	3
Psy 100 General Psychology	3	Auto 110 Technical Math	3
Math 20-30 Beginning and Intermediate Algebra (or Math 130)	3	Elective	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1		
	—		—
	17		16

SECOND YEAR

Phys 100 Physical Science	5	Mach 100 Introduction to Machine Tool Processes	5
Art 132 Introduction to Design	3	Draf 210 Production Illustration	3
Econ 202 Principles of Economics (or Introduction to Business, GB 101)	3	Draf 220 Architectural Drafting	3
Draf 200 Machine Design	3	P Sc 120 U. S. Government	3
Draf 230 Electrical and Pipe Drafting	3	Electives	3
	—		—
	17		17

SUGGESTED ORDER OF STUDY

ASSOCIATE OF SCIENCE Environmental Health Technology Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Chem 101 General Chemistry	5	Chem 102 General Chemistry	3
Biol 120 General Zoology	5	Biol 211 Microbiology	5
Math 140 Algebra & Trigonometry	5	Eng 101 Composition	3
Psy 120 Orientation	1	Hist 110 History of U.S.	3
HPER 101 Physical Education	1	Humanities Elective	3
		HPER 102 Physical Education	1
	17		18

SUMMER

Psy 100 General Psychology	3
Spch 100 Fundamentals of Speech	3
<hr/>	
	6

SECOND YEAR

Prescribed 36 week course at Water and Waste Water School. (This program may precede the academic work on the Missouri Southern State College campus.)	30
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BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH TECHNOLOGY Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Math 140 Algebra & Trigonometry	5	History 110 U. S. History	3
Bio 120 General Zoology	5	Bio 110 General Botany	5
Psy 100 General Psychology	3	Art 110 Introduction to Art	3
Psy 120 Orientation	1	HPER 102 Physical Education	1
HPER 101 Physical Education	1	HPER 100 Personal Health	2
	—		—
	18		17

SUGGESTED ORDER OF STUDY

SECOND YEAR

Chem 101 General Chemistry	5	Chem 102 General Chemistry	3
Eng 120 Masterpieces of World Literature	3	Chem 162 Qualitative Analysis	3
Econ 201 Principles of Economics	3	Bio 211 Microbiology	5
Sp 100 Speech Techniques	3	Eng 210 English Literature	3
Acct 101 Elementary Accounting	3	MM 350 Business Organization and Management	3
	—		—
	17		17

THIRD YEAR

Chem 201 Quantitative Analysis	5	Chem 300 Organic & Biological Chemistry	5
Bio 431 Animal Physiology	5	Bio 442 Invertebrate Zoology	5
Bio 312 Environmental Biology	3	PSc 210 State & Local Government	3
Bio 314 Environmental Biology Laboratory	2	MM 352 Personnel Management	3
	—		—
	15		16

FOURTH YEAR

The fourth year consists of a minimum of 36 weeks of study at the Water and Wastewater School. (This work may be taken prior to entering MSC.)

ASSOCIATE OF SCIENCE General Business Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	Hist 110 U. S. History 1492-1877	3
Acct 101 Elementary Accounting I	3	Acct 102 Elementary Accounting II	3
GB 101 Introduction to Business	3	OA 102 Intermediate Typewriting	3
Math 20-30 Beginning and Intermediate Algebra (or Math 110)	3	Spch 100 Speech Techniques	3
GB 110 Business Mathematics	3	Eng 120 Masterpieces of World Literature	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1		—
	—		—
	17		16

SUGGESTED ORDER OF STUDY

SECOND YEAR

Econ 201 Principles of Economics	3	Bio 100 General Biology	5
GB 220 Business Communications	3	Econ 202 Principles of Economics	3
MM 300 Principles of Marketing	3	GB 302 Business Law	3
GB 301 Business Law	3	MM 350 Business Organization and Management	3
Psy 100 General Psychology	3	Electives	3
	—		—
	15		17

ASSOCIATE OF SCIENCE

Law Enforcement

Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Eng 101 Composition	3	Math 110 Intro. to College	3
PSc 210 State and Local Government	3	Math I	
Soc 110 Intro. to Sociology	3	Psy 100 General Psychology	3
HPER 160 Personal Health	2	Phys 100 Fundamentals of Physical Science	5
LE 100 Intro. to Law Enforcement	3	Soc 212 Social Problems	2
LE 110 Police Organization and Administration	2	LE 150 Interview and Report Writing	2
Psy 120 Freshman Orientation	1		
	—		—
	17		16

SUMMER

LE 190 Supervised Police Work 6

SECOND YEAR

Course	Hours	Course	Hours
Spch 100 Speech Techniques	3	Hist 110 U. S. History 1492-1877	3
Soc 322 Criminology	3	Soc 412 Juvenile Delinquency	3
LE 200 Criminal Investigations	3	HPER 220 First Aid	2
LE 210 Criminal Procedures	3	LE 250 Criminal Law	3
Psy 221 Psychology of Personal Adjustment	3	LE 290 Supervised Police Work II	3
		Eng 120 Masterpieces of World Literature	3
	—		—
	15		17

SUGGESTED ORDER OF STUDY

ASSOCIATE OF SCIENCE Machine Technology

Suggested Order of Study

1st Semester

FIRST YEAR

Course	Hours	Course	Hours
Math 130 College Algebra	3	Mach 150 Technical Mathematics	3
Eng 101 Composition	3	Mach 160 Process Instrumentation	3
Draf 101 Introductory Drafting	3	Draf 130 Machine Drafting	3
Mach 100 Intro. to Machine Tool Activities	5	Mach 110 Advanced Machine Tool Processes	5
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1		
	—		—
	16		15

SECOND YEAR

Hist 110 U. S. History 1492-1877	3	Spch 100 Speech Techniques	3
Phys 100 Fundamentals of Physical Science	5	Madh 230 Jig and Fixture Production	3
Mach 210 Fundamentals of Cutting Tools	5	Mach 260 Fundamentals of Metallurgy	3
Mach 220 Tool and Die Production	3	Mach 250 Numerical Control Machining	3
	—	Psy 100 General Psychology	3
	16		—
			15

ASSOCIATE OF SCIENCE Nursing

Suggested Order of Study

1st Semester

2nd Semester

FIRST YEAR

Course	Hours	Course	Hours
Bio 221 Human Anatomy and Physiology	5	Chem 100 Introductory Chemistry	5
Eng 101 Composition	3	Psy 100 General Psychology	3
Soc 110 Introduction to Sociology	3	Nurs 120 Nursing in Physical Illness I	8
Nurs 100 Fundamentals of Nursing	5	HPER 102 Introduction to Physical Activities II	1
HPER 101 Introduction to Physical Activities I	1		
Psy 120 Freshman Orientation	1		
	—		—
	18		17

SUGGESTED ORDER OF STUDY

SUMMER

Nurs 130 Nursing in Mental Illness 4

SECOND YEAR

Bio 231 Fundamentals of Medical Microbiology	5	PSc 120 U. S. Government	3
Eng 102 Composition	3	Spch 100 Speech Techniques	3
Nurs 210 Maternal & Child Health	10	Nurs 240 Nursing in Physical Illness II	10
	—		—
	18		16

ASSOCIATE OF SCIENCE

Radiologic Technology

Suggested Order of Study

FIRST YEAR

Bio 221 Human Anatomy and Physiology	5	Math 20-30 Beginning and Intermediate Algebra or Math 130 College Algebra	3
Rad 101 Introduction to Radiology	3		
Rad 111 Medical Terminology	5	Psy 100 General Psychology	3
Rad 121 Patient Care and Special Procedures	3	Rad 132 Principles of Radiographic Exposure	3
Psy 120 Freshman Orientation	1	Rad 142 Radiographic Positioning I	3
HPER 101 Physical Education	1	Rad 152 Osteology	3
	—	HPER 102 Physical Education	1
	18		—
			16

***SUMMER**

Rad 160 Film Critique	2
Rad 170 Physics I	3
Rad 180 Practicum in Radiology I	5
	—
	10

SUGGESTED ORDER OF STUDY

1st Semester

2nd Semester

SECOND YEAR

Course	Hours	Course	Hours
Chem 100 Introductory Chemistry	5	Hist 110 History of the U. S.	3
Eng 101 Composition	3	Spch 100 Speech Techniques	3
Psy 221 Psychology of Personal Adjustment	3	Rad 252 Radiographic Positioning III	3
Rad 241 Radiographic Positioning II	3	Rad 282 Practicum in Radiology II	3
Rad 271 Physics II	3	OA 101 Elementary Typing	3
		Humanities Elective	3
	17		18

*SUMMER

Rad 290 Practicum in Radiology III	5
Rad 299 Advanced Radiology	3
	8

*Summer classes meet a minimum of 14 weeks.

ASSOCIATE OF SCIENCE Secretarial Science

1st Semester

2nd Semester

FIRST YEAR

Eng 101 Composition	3	Hist 110 U. S. History 1492-1877	3
OA 111 Elementary Shorthand	3	Spch 100 Speech Techniques	3
OA 102 Intermediate Typewriting	3	OA 120 Intermediate Shorthand	3
GB 101 Introduction to Business	3	OA 200 Advanced Typewriting	3
Math 20-30 Beginning and Intermediate Algebra (or Math 110)	3	Eng 120 Masterpieces of World Literature	3
HPER 101 Introduction to Physical Activities I	1	HPER 102 Introduction to Physical Activities II	1
Psy 120 Freshman Orientation	1		
	17		16

SECOND YEAR

Acct 101 Elementary Accounting I	3	Bio 100 General Biology	5
GB 121 Office Machines	3	GB 220 Business Communications	3
Psy 100 General Psychology	3	OA 230 Secretarial Procedures	3
Econ 201 Principles of Economics	3	GB 301 Business Law	3
OA 210 Advanced Shorthand	3	OA 220 Dictation & Transcription	3
	15		17

SUGGESTED ORDER OF STUDY

Secretarial-Typist Certificate

Required Order of Study

One-Year Schedule

1st Semester		2nd Semester			
Spch 100	Speech Techniques	3	GB 220	Business Communication	3
Eng 101	Composition	3	OA 210	Advanced Shorthand	3
GB 101	Introduction to Business	3	GB 121	Office Machines	3
GB 110	Business Mathematics	3	OA 220	Dictation & Transcription	3
OA 210	Advanced Shorthand	3	Acct 101	Elementary Accounting I	3
Psy 120	Freshman Orientation	1			
		—			—
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